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A DISCOURSE OF THE VVHOLE ART OF CHYRURGERY.

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VVherin is exactly set down the Definitions Causes, Accidents, Prognostications and Cures of all sorts of Diseases, both in generall and particular, which at any time heretofore have been practised by any Chyrurgion, According to the opinion of all the ancient professors of that Science.

Which is not only profitable for Chyrurgions, but also for all sorts of people; both for preventing of Sickneſſe, and recovery of Health.

Compiled by PETER LOVVE *Scottiſhman*, Doctor in the faculty of Chyrurgerie at *Paris*, and ordinary Chyrurgion to the French King and *Navarre*.

Whereunto is added the Rule of making Remedies which Chyrurgions doe commonly uſe, with the Preſages of Divine Hippocrates.

The fourth Edition; corrected, and much amended.

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TO

The Vertuous, Right Honourable,

and moſt worthy of all honours, and good titles,

JAMES HAMILTON, *Earle of* Abircorne, *Lord* Paſlay Kilpatrick, Monkcaſtle, &c. *Knight of* Mungton, *Sheriffe heretable of* Linlithgowſheire, *one of his Majeſties moſt Honourable privie Councell: Your Honours dutifull loving ſervitour wiſheth a long and happie life, with increaſe of Honour and Vertue.*

MY VERY GOOD LORD, The univerſall approbation of the beſt practiſed in my profeſſion abroad, of a few of my travells, hath emboldned me to review them more curiouſly, and renew them in more comely faſhion, detracting what ſeemeth ſuperfluous, and ſupplying ſome defects. In which labour, I have experimented the undoubted truth of the vulgar ſaying. That our laſt workes ſmell of greateſt perfection, proceeding from riper judgement. The moſt ſufficient in all ages, *provocarunt a prioribus ad poſteriora cogitata: Deus & natura ut nihil fruſtra ſit, nec præcipitanter:* as God in the production of the great world, uſeth ſucceſſive creation, ſubſtituting the moſt con-

ſummate workes to the anticedent; Man the abridged Image of the Divinitie, the Crowne and end of all: but ſo, that his matter preceedeth his form, *argillaceo ergaſtulo ſpiraculum vitæ inſufflatum*: ſo nature in the fabrication of the *Microcoſme* of the *Embryon*, which time formeth *omnibus numeris abſolutum hominem*, Thus fareth it with the Imitators of ſo accompliſhed Architypes; in whoſe number I enrowle my ſelfe, having already publiſhed the firſt fruits of my ſtudies of the whole Art of Chyrurgerie, in Theorick and Practick, with the curation of a great many other diſeaſes not yet practiſed by any Chyrurgion: but yet as a matter ſomewhat indigeſt, which now I recall and ſtrive to perfect in a more methodicall order. All which I emboldned my ſelf to ſhroud under your honourable ſhield and protection, in regard of your Honors manifold curteſies and liberalities extended to all Schollers and ſtrangers, whereof I have good experience in infinite benefits beſtowed by your Honour, for the which doe I thinke my ſelfe principally bound to doe you all ſervice. The which I being now willing to performe, as alſo tendring the commoditie and benefit of my native Country, as likewiſe to exonerate my ſelfe of that burden which every man is bound to undertake for the cõmon-wealth. But if my induſtry could have produced better effects, it would rejoyce to paſſe under the protection of ſo honourable a Patron. May it then p'eaſe your Lordſhip, (even as *Minerva* harboureth her Owle under the targer, *Citherea* the deformed *Cyclops* in her lovely boſome, and *Apollo* the night raven under the heavenly lute) to accept in good part, the painefull travels

travels of your humble ſervant, as a manifeſtation of my unfained ſervice, and particular duty to your Honour: which I humbly offer to you as a pledge of my zeale and good will toward you, your Honorable and matchles vertues, which are ſprung partly from your noble Parents, but more plentifully enriched by your invincible minde, and peereles endevours, whereby yee manifeſt to the world the true *Idea* of perfect nobilitie, leaving to your poſteritie a memorable remembrance of your never dying Fame. If your L. will vouchſafe to patronize my travels, far unworthy ſo honourable a Patron, I ſhall be ſafely protected from the malignitie of Calumniators, who pick out detractions of the perfecteſt works; as the *Cantharides* poyſon of the moſt fragrant flowers: but my labours want not their reward, if it winne your L. good will: nor my minde his deſire, if your L. vouchſafe your favour. And thus beſeeching God the giver of all true honour, with wiſedome to encreaſe both theſe bleſſings in you, with as many happy years, as vertues, and whatſoever good thing elſe: commending my labours with my ſelfe to your L. honourable protection and good liking, as one that daily entermitteth not to wiſh the advancement of your Honourable eſtate. So I humbly take my leave at my owne houſe in *Glaſgow*, the 20. day of December in the yeare of our Lord God, 1612.

Your Honours moſt dutifull

ſervitour to command.

PETER LOVVE.

To the friendly READER.

IT is commonly ſaid, as it is of truth (good friend) that idlenes is the mother of all vices, which doth not only engender them, but alſo nouriſheth and entertaineth the ſame: for avoiding whereof, as alſo becauſe thou haſt had my firſt labours agreeable, I have taken courage to travell further for thy profit: for my greateſt contentment is to advance thy ſtudy, and to inſtruct thee in the whole courſe of Chyrurgerie, with the manner to cure the moſt part of all diſeaſes uſually practiſed by Chyrurgions, as well by ancient as late Writers, of divers and ſundry practiſes, and hidden ſecrets, not practiſed heretofore by any Chyrurgion, as you ſhall clearly perceive in this work. Three things doe I not publiſh, as Plato his Common-wealth, Cicero his Oratorie, and Sir Tho. More his Eutopia: Leaving to the world a wiſhed perfection not practiſed. But I impart to you my labours, hidden ſecrets, and experiments by me practiſed, and daily put in uſe, to the great comfort, eaſe, and delight of you, and ſuch as have had occaſion to uſe my help in France, Flaunders, and elſewhere, the ſpace of 22. yeers: thereafter being Chyrurgion-Major to the Spaniſh Regiments at Paris 2 yeers: next following the French King my Maſter in the Warrs 6. yeers, where I took commoditie to practiſe all points and operations of Chyrurgery. Upon which occaſion I endeavoured my ſelf to collect my practiſes at vacant hours, into this Book, according to the opinion of the ancient and learned practicioners, in Phyſick and Chyrurgerie, in ſuch plain terms as I could, for the uſe of the common ſort: which now I doe offer to thee newly corrected and enlarged for thy greater comfort. Seeing then I doe not intreat of any vain fable, but of ſuch earneſt and ſerious matter as toucheth the profit of all men in generall, and

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the benefit and commoditie of every one in particular : ſo I hope the Readers hereof will vouchſafe to attribute and grant ſuch diligence and willing eare, minde, and attenſion hereunto, as yee are accuſtomed in theſe caſes which yee account moſt Weightie, grave, and neceſſarie, and which yee are moſt deſirous to know, learn, and underſtand ; here in thou maieſt reap the fruits of my travels and ſtudies, and by thy friendly accepting of my labours, or at leaſt my good will, thou ſhalt gain to thy ſelf fruition and commoditie of ſuch other things as I ſhall enforce my ſelf in ſhort time to entreat of, profitable for all men, as you ſhall perceive hereafter, ſpecially in the Treatiſe of the help of Women in their Infantment, with the curation of ſuch diſeaſes as happen to maydens, and married Women, with the Treatiſe called the Poor Mans guide, which are Works eſteemed by the learned : who have ſeen them moſt neceſſary for the Common-wealth. Some men perhaps more reſpecting their own private gain, than publique profit, will think that I ſhould have concealed the miſteries of this Art, as the Ægyptians, who were the firſt inventers of it, did write in letters Hierogliphiques, all their remedies. But I rather follow the Græcians, who uſe once every yeer to write in the temple of Æſculapius, that was dreſſed in Epidauro in the preſence of all the People, all the ſicknes they had cured, together with their ſeverall remedies : for as the Philoſopher Ariſtotle ſaith, Bonum quò communiùs, eò præſtantiùs : alſo being moved by the counſell of Plato, who writ divinely : and Cicero in the firſt of his offices, ſaying, We are not born for our ſelves, nor ſhould have regard to our own particulars, but alſo to the commoditie of our parents, friends, & generally to the Common-Wealth of that Country where we took our birth. The which was alſo obſerved amongſt the old Romanes, when their eſtate moſt flouriſhed : For they did account him among the number of the infortunate, that during his life did not manifeſt himſelf in ſome one publique benefit or other, his affections and thankefull heart to the place wherein he was firſt bred. Nevertheleſſe, there will be ſome envious, malicius, and ignorant perſons, Who only are born to find fault, before they will or can underſtand, not ceaſing to bark at me, and my travels yet neither

ther have power to bite, nor doe better. Such I may justly compare to Aristarchus, *or* Antiphilos, *those peereles pick-thanks, whose filthy hearts being so inflamed with malice, will find fault. To whom I will answer that of* Erasmus Roterodamus. Ut ignavi canes omnibus ignotis allatrant; ita Barbari qui quid non intelligunt, carpunt ac damnant. *Only upon this hope I rest, that as in good Will and love I have done this for the advancement of all men, specially young Chyrurgions, so the well disposed and all such friends, who Will weigh errour in ballance of good Will, Will censure in the best sort, and where the defects are, they Will in friendly and charitable manner correct, and amend the same. To such doe I addresse this Work: whom I hope will consider, that in man no perfection can be fonnd, but only belongeth to God. The Ignorants, and such as find fault, I would desire them to put to their hands and doe better: wishing every man as much profit, and benefit in reading hereof, as my willing attempt hath intended them. And so I end, bidding thee most heartily farewell, from my house in* Glasgow, *the* 20. *day of December in the yeer of our Lord God* 1612.

PETER LOVVE.

TO

TO

My very VVorſhipfull, learned, and *well experimented good friends*, Gilbert Primroſe, *Sergeant Chyrurgian to the Kings Majeſtie*; JAMES HARVIE *chief Chyrurgion to the Queens Majeſtie; thoſe of the Worſhipfull Companie of Chyrurgions in* London, *and* Edenborough, *and all ſuch well experimented men in this Kingdome, who are licenced to profeſſe the Divine art of Chyrurgerie*: Peter Lowe *wiſheth all happineſſe of life.*

ALL Men of vertue, and well affectioned to the Common-wealth (Worſhipfull Brethren) ought without all diſſimulation to endeavour themſelves by all means poſſible, to inſtruct ſuch as are and doe ignorantly in that which is profitable to the Common-wealth: as alſo to make ſuch know that which is hurtfull and unprofitable, to the effect, the ſimple or common ſort, may chooſe that which is commodius and profitable, and reject that which is hurtfull: For theſe, and divers other good conſiderations, ought all Men (chiefly yee who have Authoritie, Learning, and Knowledg in the Art) to ſtop ſuch as work unskilfully: as I doubt not, to the griefe of all honeſt Men, this Art is ſeen daily abuſed by a number of ignorant malicious people, who paſſe away, (but tryall, or puniſhment) like as coſoners, quack-ſalvers, charlitans, witches, charmers, and divers other ſorts of abuſers; whoſe

names I will for the preſent omit, in hope they will deſiſt, their own conſciences accuſing them ; But alas I doubt not, but the moſt part of them lack both ſoul, conſcience, and fear of God, are of more unhappy life, ignorant, and void of all skill, giving ever to the diſeaſed *quid pro quo*, promiſing marvails, and to cure all things in ſhort ſpace : which I grant is a ſure *Maxime*, as I could give over many examples to the deſtruction of many, and grief of thoſe to whom they appertain. Of thoſe abuſers, there are eight or nine divers ſorts : For ſome run from one town to another, promiſing to heal all things by vomitaries, and laxater, chiefly with Antimonie, Præcipitatum, (which is powder of Quickſilver) Laureola, Elebour, Colocynth, Æſula, Catapus, and divers other poyſonable medicaments, full of venom uncorrected, without either waight or meaſure : thoſe are the death of infinite numbers, who for the moſt part end their daies by cruell vomiting, inſatiable going to the ſtool, with ſyncops and intolerable dolour of the ſtomack and inteſtines ; of thoſe, ſome die the firſt or ſecond day ; the moſt robuſt, the ſeventh or eight day at the fartheſt. Another ſort of thoſe deceivers alledg to have their knowledge by reading ſome other vulgar Books, thoſe fellowes promiſe rare things, and are garniſhed with ſome words that are obſcure, and not common, nor well can be underſtood to themſelves, or by their Auditor : But to make it the more plauſible, they ever thruſt in thoſe obſcure words, in any purpoſe, and to make the matter to have more faith, they enterlace Scripture, with ſighs, and ſobs, and divers other circumſtances. The third takes upon him to heal all things by Charmes, and praying to Saints of the like name that the ſickneſſe is of, alledging the diſeaſes to be ſome Saints evill, as for example : ſuch as become paralitick through a deflux of humors on the nerves, they term it to be a blaſt of evill wind, and by praying to St. *Blaot*, it ſhall heal : ſuch as are hydropick, doe pray to St. *Hidrop* : ſuch as loſe their ſight, pray to St. *Cleere* : thoſe who hear evill or hath diſeaſe in their eares, pray to St. *Owyn* : ſuch as hath the gowt called *Chiragra*, or any other diſeaſe in the hands, pray to Saint *Main*,

Main, with divers other which were long to repeat. Thoſe deceitfull ignorant people, conſider not that all thoſe diſeaſes were long before any of thoſe Saints. The fourth ſort alledge to have the curation of all diſeaſes from their Parents, as heritage, and thoſe be impudent deceivers. The fift ſort vaunts to be skilfull in ſuch like diſeaſes, by experience upon themſelves, alledging them to be moſt skilfull in the cure of the French Poxe, becauſe he was cured himſelf ſundry times of the ſame diſeaſe. The ſixt takes upon him to cure all things by poyſonable Vomitaries only, chiefly Antimony, by the which thoſe deceivers perverts all orders divine and humane, in Townes, and Nations, as ever hath been obſerved in Phyſick, that hath many evils happening, expreſly condemned by *Hippocrates*, and divers other of the learned. The ſeventh ſort of thoſe ignorants, having ſome ulcers in their legs, or armes a certain ſpace, takes upon him to heal all ſores, alledging by ſome revelation, to have an unguent, called *unguentum ad omnes plagas* : this fellow with the reſt doth cure all their abuſes and miſchiefs, with a truce or ſtone. The eight ſort who having almoſt drunk out one of his eyes, and uſeth ſome few remedies for the ſame, profeſſeth himſelf to be a fine Eyneſt. The ninth ſort who hath been cut of the ſtone, or rupture, or ſeen beaſts cut, takes upon him to be moſt excellent in the rupture, or ſtone. All thoſe with divers others take on them to have done many cures, yet they forget the infinite murthred by them. Such miſchiefs were never ſuffered among the Infidels, much leſſe ſhould be amongſt Chriſtians, to the great diſhonour of God and his Lawes. I read at *Rome* in the time of *Cato*, that ignorants were baniſhed that Common-wealth, the learned only and expert retained for the preſervation of the publick weal, with power to ſuch, to puniſh all abuſers who durſt be ſo bold to tranſgreſſe the commandements, conſtitutions, ſtatutes and ordinances divine and humane. I might recite here many authorities both of the ancient and new writers, as well of Ethnicks as Chriſtians, whereof ſufficient witneſſes remain of the great pains they have taken in keeping the Canons of this

Art and puniſhing of Impoſtors in ſuch ſort, that they were eſteemed as Gods. Seeing thoſe Ethnicks have been ſo curious in this matter, how juſtly may wee that take the name of Chriſtians be evill thought of, for ſuffering of ſuch abuſers in our Art: yet I hope all honeſt men, eſpecially you, who are towards his Majeſtie, will be earneſt in purchaſing of privildges and lawes, for reſtraining of all ignorant abuſers in this Kingdome, like as is granted to Men of our Art, in other civill Countries to the great ayd and comfort of all Kings of thoſe parts. It pleaſed his Sacred Majeſtie to hear my complaint about ſome fourteen yeers agoe, upon certain abuſers of our Art, of divers ſorts and ranks of people, whereof wee have good ſtore, and all things failing, unthrifts, and idle people doe commonly meddle themſelves with our Art, who ordinarily doe paſſe without either tryall or puniſhment. The matter being conſidered, and the abuſe weighed by his Majeſtie and Honourable Councell, thought not to be tolerated, for the which I got a priviledge under his Highneſſe privie ſeal, to try and examine all Men upon the Art of Chyrurgerie, to diſcharge, and allow in the Weſt parts of *Scotland*, who were worthy, or unworthy, to profeſſe the ſame. The which I obſerved as I might, although there be Men of greater authoritie and ſufficiency to puniſh, and correct ſuch if they would. But ſuch is the iniquitie of time, that abuſers are commonly over ſeen by ſuch as ought to puniſh them: in ſuch ſort that one blinde guides another, and moſt commonly fall both into the ditch. In the mean time theſe cheaters are permitted to uſe charms, lies, excreable oaths, mortiferous poyſon, fallacious and uncertain experiments, whereby they deſtroy both friend and foe, ever detracting the true profeſſors of the Art. Now worſhipfull Brethren, in reſpect of thoſe enormities with divers moe, which were long to repeat, I doubt not but all yee who are learned and true profeſſors, having acceſſe, and credit with his Majeſtie, will ſeek and obtain ſuch priviledges, and lawes, as well to correct and puniſh abuſers, as alſo to withſtand the frivolous or fantaſticall opinions of ſuch as uſe them, and neither for requeſt

queſt nor lucre, to admit any ſuch ignorant abuſers to profeſſe our Art, but ſay with the Learned Philoſopher, *Plato*, *Socrates*, that the world are our friends, but the veritie above all. Which veritie maketh the flouriſhing of all Common-wealths, arts and ſciences. The which if you endeavour your ſelf to proſecute, no doubt but that God of veritie who doth recompence each one according to his merits, as alſo doth puniſh tranſgreſſors, ſhall reward you accordingly. The which God I beſeech to bleſſe and proſper each one of you in your calling, with good ſucceſſe in your Cures, happie end in this world, and life eternall hereafter. From my houſe in *Glaſgow*, the 20. day of December in the yeer of our Lord God 1612.

Your loving friend

PETER LOVVE.

G. Baker one of his Majeſties chiefe Chyrurgyons in ordinarie.

WHO can deny, but he deſerves great fame
that profit yeelds, t' all Nations where he goes?
His Country may rejoyce to heare his name,
that in ſtrange Lands, ſuch books of knowledge ſhows.
His ſtudy's how to make good Surgeons knowne,
rebukes the bad, and honours men of skill:
Then let him reape the Corne which he hath ſowne,
his harveſt ſeekes no more but worlds good will.
The Schooles hath plac'ſt him in an Artiſt's ſtate,
The graveſt here his Learning doth commend.
The Learned ſees his ſtudie hath beene great.
Whereby he brings great things to perfect end.
A wonder is, how world bare men rewards
For ryding horſe, or dreſſing meat you ſee,
And thoſe that ſave mens lives they leaſt regard,
for they get neither ſtipend, gift, nor fee.
Blind is that age that doth the beſt deſpiſe,
And helpes the worſt, to worſhip, wealth, and grace.
A common thing, Vice lets not Vertue riſe,
But holds it downe, that ought have higheſt place.
Yet none can rob the Learned of their right,
No more than take ſweet ſmell from flower in field.
Then Doctor *Lowe* thy lampe doth give ſuch light,
That every one to vertue fame doth yeeld,
Paſſe on with prayſe through every ſoyle and coaſt,
Where *Lowe* is knowne he ſhall be honoured moſt.

G. B.

John

In praiſe of the Author.

John Norden *Phyſitian in prayſe of the Author.*

Apollo ſeene in ſimples, for his Art
in curing men, a God was nam'd to be:
knowing all ſecrets in each hidden part,
That vertue yeeldeth to each hearbs degree.
And by his knowledge of hearbs ſimplicitie,
The Heathen tooke him to be a Dietie,

For when as Nature wounded, was oppreſt,
Not able to ſuſtaine the griefe ſhee bare:
The body dying, then for want of reſt.
ſimples recured, ſuch their vertue are:
That who ſo ſeekes, and knowes, each ſimple found,
Their Nature ſoone ſhall cure any wound.

See *Chiron* here, *Apollo's* Puple, hee
Declares the ſecrets of his Maſters skill:
He ſeekes no meed, nor lookes for any fee,
Then give him honour for his meere good will:
That being Stranger born, yet loves us ſo,
To leave his Art with us to cure our woe.

In prayſe of the Author, LENVOY.

LOW, is thy name, high growes thy fame
Amongſt all Engliſhmen;
Thy Book ſhall ſave my verſe from blame,
When world well weighs thy penne.
If *Zoylus* or *Momus* brood,
Doe carp at thee, what then?
Feed thou thy hope with heavenly food
Amongſt wiſe learned men.

Iohn Norden Phyſitian

Thomas Churchyard Eſquire, in praiſe of the Author and his Worke.

THe *Nobleſt ſcience under ſunne,*
That moſt mens live, doe ſave,
The art that greateſt praiſe hath won
Whereby great helpe we have,
Is Surgerie, *for knowledge there,*
In higheſt grace doth ſhine:
The skill is honoured every where,
For ſpeciall griefes divine.
When wrath & rage makes quarrels (riſe,
And men in furie fight.
In Surgeon ſuch great knowledge lies,
Greene wounds are healed ſtraight.
Fleſh cut, blood loſt, & every vaine,
And ſinnewes ſhrunk away,
He can by art reſtore againe:
And comfort their decay.
The mangled bones are ſet and knit,
In their owne proper place,
And every Limme in order fit
Comes to their force and grace.
By Surgeons mean who quickly ſees,
The dangers as they are:
And mends the miſchiefs by degrees,
With knowledge and great care.
Hath inſtruments to ſearch each joynt
Each ſkull or bruiſed bone:
And can with balmes & eyles anoynt
The nerves and vaines each one.
Knows all the nature, and each kinde
of hearbs, of flowers, and weeds,
And can the ſecret vertue finde
Of bloſſomes, leaves, and ſeedes.
Heales cankers, ulcers, and old ſores,
Hath precious powders ſmall
To eate proud fleſh and rotten knots,
And drie up humor all.
What griefe of body can be nam'd,
But he can help in haſte?
Tea though the liver be inflam'd,
And lights or lungs doe waſte.
In time and temper he can bring,
The lacke of each lame part,
As though in hand he had a ſtring,
To leade mans life by art. (cald,
Halfe gods good Surgeons may be
much more than men they be,
And ought like Doctors be enſtald:
in ſeats of high degrees
What doth preſerve the lives of men,
May claime due honor right,
And ſhould be praiſ'd by tong and pen,
As far as day gives light.
Long ſtudie gives a glorious crowne,
A garland decke with flowers,
Under whoſe ſhade of rare renowne,
The Muſes make their bowers:
To ſit and ſee whoſe gifts excell,
In Wit and cunning skill: (will,
Who beſt doth worke, who doth not
And who bears moſt good will
To vertue, learning, and good mind,
The Muſes favour thoſe,
And gives them grace of their owne
Great ſecrets to diſcloſe, (kind,

Revives

Reuiues their Wits, makes ſharp their
To iudge, diſcerne, & know: (ſenſe,
Whoſe tongue is typt With eloquence,
And whoſe fine penns doe flow,
And Who the liberall art detains,
And mortall vertue haue,
In whom a hidden skill remains:
And cunning knowledg braue.
It ſeems a ſtranger here of late,
Hath from the Gods diuine,
Got credit, honor, and eſtate,
To pleaſe the Muſes nine.
The Surgeons of our King likeWiſe,
Doe praiſe him for his skill,
His printed Books may well ſuffice,
To winn the worlds good will.
His merits far ſurmount the loue,
I bear to men of worth,
My pen doth but affection moue,
His deeds doe ſet him forth.

His knowledg makes blind banglers
Their boldnes brings him fame (blaſh
Vaine Valentine *not worth a ruſh,*
Where Lowe *but ſhews his name.*
You paultry, ſenſeles, ſauſie Jacks:
That patch up wounds in poſt,
Trudg hence, truſſe up your pedlers
He cares not for your boaſt, (packs,
His face and brow from blot is cleer,
The Sages of our Soyle,
Bids Doctor Lowe, *ſtill welcome here*
To your great ſhame and foyle.
Who well deſerues, is honored much
As tryall daily ſhewes,
Who hath good name, is wiſe and rich,
And loued where he goes.
Since of this Doctor and his Art,
Thoſe vertues I rehearſe,
I him in every point and part,
Salute with Engliſh Verſe.

Qd. Thomas Churchyard Eſquire.

In Commendation of M. Peter Lowe, By Anagram, Let Power.

MY ſimple Muſe too ſimple to recite,
A *Chorus* of thy Chirurgion prayſe,
Yet from my willing minde accept this myte
Fraught with affection and no frivoul phraſe,
Thy Booke, the beautie of thy brow bewrayes,
This worke, thy worth and never-dying will,
Thy true reported diſcipline diſplayes,
That learned ſcanſen of thy former skill.
Goe on rare *Lowe*, and uſe thy talent ſtill,
Grudge not, what ſpeech thoſe ſpitefull minds expels,
The Fates hath (*Let*) thee (*Power*) for to kill
Thoſe murmuring *Momus*, apt for nothing elſe,
Now may you end your old Chyrurgion ſtrife,
Lowes Lanterne can *Let Power* to your life.

Ad virum vertute & doctrina
præſtantem, *Petrum Lowæum*,
Chyrurgiæ Doctorem.

Carmen Iambicum.

SUnt plurimi, quos eſſe ſplendidos juvat,
Alterius & ſuperſtites virtutibus
Claruere poſteris: Opus laudarier,
Dignumq́, creta ſcilicet notarier,
Sic proditur Vappa hominis & mens degener.
Sunt quos priorum inventa, clarioribus
Ditarier multum ſuis, juvat notis:
Opus mehercule laude dignus ſua.
Namq́, eſt boni quocunq́, vel juvamine
Bene poſſe: nec non velle poſteris bene,

Sed

In laudem Authoris.

Sed quid mireturr ille, propia manu
Non qui addit inventis, ſed invenit prior;
Solum furere, polum ferire vertice,
Nec non haberi vel humanus Deus,
Homo vel eſſe divus in omne ſeculum.
Hoc differens ſolum a Deo vivus, quod is,
Dum illuſtrat humani tenebras ingenii,
Perdurat idem nautiquam mutabilis:
At hic velut candela, quæ dum illuminat:
Noſtros ocellos, proprio lumine deperit:
Poſt reliquum eſt: habemus hoc quod vidimus.
Tua ergo perge dare, fereſq́, hanc gloriam:
Nec propriis vixit, nec obiit commodis.
Quod & fatentur ultrò & uſq́, prædicant
Qui vel tuum hoc videre opus chirurgicum:
Sic mortuo virtus alet famam tibi.

I. M. C.
V. Med. Doctor

Ad doctiſsimum virum *Petrum Loweum* Chirurgiæ Doctorem.

Cælidis in auguſto præcepta volumine cuncta,
Quæ Cons Hippocrates, *quaq́,* Galenus *habet.*
Conſidet hic viridi lauro redimitus Apollo,
Delphicus illa ſuo protulit ore Deus
Sed latuit nimium theſaurus tantus: amicis
profer: & in medium progrediatur opus.

M. I. O. Chir. Pariſi.

In

In librum chirurgicum *Petri Lovei* chirurgi Britanno Scoti carmen Encomiaſticon. Lectori.

Accipe phœbeitam nobile munus alumni,
In lucem eximiæ, qui dedit artis opus.
Nocturna verſato manu, verſato diurna,
Hoc opus eximium Lector amice, præcor.
Nullus adhuc melius, morbos, medicamina, cauſas,
Et methodum docuit, artis Appollineæ.
Annos ante aliquot quæ Chirurgemata partu,
Fœlici peperit, parturit hæc eadem.
Ac multis auget numeris; genio, ingenio, ſe
Monſtrat Chyrurgum, nomine, req; bonum,
Fœlix Ambroſio *quondam Gens Galla* Pareo,
Nilq; minus noſtro Scotica gens Loveo.
Gratia magna ſuo debetur, lauſq; labori:
Perpetuum auctorem nam manet inde decus.
Macte ergo virtute Petre, *hæc tua ſcripta tulerunt.*
Artis & ingenii clara trophæa tui.

Zoilo.

Dente Theonino, qui carpere cuncta; vel audes
Vel cupis hic dentem zoile frange tuum.

Jacobus Harvæus Sereniſſimæ
Reginæ Chirurgus Primarius.

The

The Names of the Authors, both Hebrues, Arabians, Greeks, Latines, and French, whoſe help I have uſed in this Work.

A

Abdales.
Adamus Lonicerus.
Ætius.
Æraſtus.
Albertus Magnus.
Albucaſis.
Alexis Pedomontanus.
Alexander Aphrodiſienſis
Alexander Peripateticus.
Alexander Benedictus.
Alphonſus Ferreus.
Ambroſius.
Amatus Lucitanus.
Andreus de Bruell.
Andromius de Vinſor.
Antillus.
Antonius Benevenius.
Antonius Sebelicus.
Antonius Muſa.
Anaxagoras.
Andreas Furneſius,
Apuleus Platonicus.
Archigenes.
Arculeus.
Ariſtoteles.
Arnoldus de villa nova.
Attilus.
Averroes.
Avicen.
Azaramius.

B

Baccanellus.
Bayrus.
Baptiſta Montanus.
Baptiſta porta.
Bartholomeus.
Barta Papillia.
Blemor.
Bodinus.
Brunus.
Bruenſueck.

C

Cato.
Cardanus.
Capivaccius.
Celſus Aurelius.
Chelmetius.
Chiron,
Cicero.
Clemens Alexandrinus.
Columbus.
Conſtantinus.

Conſtantinus Africanus.
Conſtantinus.
Cornelius Agrippa.
Cornelius Celſus.
Cyreneus.

D

Democrates.
Dioniſius.
Dioſcorides.
Divus.
Dodoneus.

E

Empedocles.
Evonimus.

F

Fallopius.
Fernelius.
Fiorouantus.
Franciſcus Roſetus.
Franciſcus Pedomontan.
Fuchius.
Fumanellus.

G

Galenus.
Gellius.
Georgius Piſtoreus.
Georgius Cufnerus.
Gordonius.
Gualterius Brant.
Gualterius Riff.
Guydo de Canliato.
Gulielmus de Saliceto.
Gulielmus Placentinus.

H

Haly Abbas.
Heliogabalus.
Henricus.
Henricus Rantzovius.
Herodotus.
Herophilus.
Hippocrates.
Holerius.
Homerus.
Hurnius.

I

Iacobus Divus.
Iacobus Dondus.
Iacobus Hoterius.
Ieſus filius Hali.
Iahannis Frant.
Iohannis Langius.
Iohannis Lebot.
Iohannes de Vice.
Iohannis de Vigo.
Iohannes Separionis.
Iubertus.
Iuſtinianus.

Langfrancus.

L

Langfrancus.
Laurentius.
Leonellus Faventinus.

M

Magninus Mediolanenſis.
Marcus Antonius.
Marcellus.
Marcus Lepidus.
Macrobius.
Marianus Sanctus.
Matheolus.
Meſſalinus.
Meſues.
Menodotus.
Mizaldus.
Moſes.

N

Nicholaus Alexandrinus.
Nicholaus Abraham.
Nicholaus Leoniceus.
Nicholaus Monardus.
Nicholaus Myrepſus.
Noſtrodamus.

O

Olphanſius Ferreus.
Oribaſius.
Oriſis.
Orphe.

P

Palmareus.
Paracelſus.
Pareus.
Parmenides.
Paulus Ægineta.
Petrus Hiſpanus.
Petrus de Argilla.
Petrus Franco.
Petrus Primandey.
Petrus Tuxiganus.
Petrus Angelus Agathus.
Philippicus Gavilonius.
Plato.
Platin.
Plinius.
Pithagoras.
Poſſidonius.
Primander.
Ptoleme.

Q

Querſitanus.

R

Raſis.
Rogerius.
Robertus Gropretius.
Rollandus.
Rondoletius.

Roſa

Rosa Anglicana.

S

Sardinius.
Shelander.
Scribonius Largus.
Soranus.
Stephanus Grumlen.
Statius.
Synecius.
Sylvius.

T

Tangacius.
Tertullianus.
Thales.
Thesaurus Pauperum.
Theodoricus.
Theodorus.
Theophrastus Paracelsus.
Titus Livius.
Trallianus.

V

Valerius Maximus.
Vezatius.
Viaticus.
Vickerus.
Vido Vidio.
Ulpianus.

Y

Ysidorus.

Z

Zenophanes.

A Diſcourſe of the whole Art of Chyrurgery.

By Peter Lovve *Scottiſhman.*

This Diſcourſe is divided into ten Books; the firſt whereof containeth 14. *Chapters; whoſe contents be theſe.*

Chap. 1. Of the Originall, antiquity, and excellency of Chyrurgery.
2. Of Chyrurgery in generall the operations & inſtruments thereof.
3. Of naturall things in generall.
4. Of the Elements and conſideration thereof.
5. Of the Temperaments and Complexion of mans body.
6. Of the four humors, in particular and generall.
7. Of Members, and parts principall of the body.
8. Of virtues and faculties, and whereof they proceed.
9. Of Actions, and operations of virtues.
10. Of Spirits, and whereof they proceed.
11. Of Age.
12. Of the entertainment of old age.
13. Of remedies to be uſed by aged people.
14. Of Colour, Figure, and Kinde.

Chapter I.

¶ Of the Originall, Beginning, Antiquitie, *and Excellency of Chyrurgery.*

Conſidering with my ſelfe, that all men are naturally obliged to ſerve the Commonwealth by ſome honeſt profeſſion, and that no man is able to diſcharge that dutie and benefit to his native Countrey, except he learn in his tender age the Science wherein the ornament thereof conſiſteth; after full deliberation I

applyed my ſelfe to the ſtudy of Chyrurgery, which is by the conſent of all learned men, not only a ſcience very profitable and neceſſary to all ſorts of people, but alſo moſt ancient and honorable, as manifeſtly teſtifieth all antiquity: in reading whereof we find the invention of Chyrurgery aſcribed (for the excellency thereof) to the Gods themſelves, to wit, to Æſculapius, Son of Appollo from the which Podalire & Machaon his Sons, learned the ſame and cured ſundry and divers which were deadly hurt at the ſiege of Troy as reporteth Homer the Poet. Clemens Alexandrinus ſaith, that the firſt Operator was Mizram Son to Ham the Nephew of Noah, and after him Apis, and Orizis Kings of Ægypt, Cornelius Celſus ſaith, that it was found and exerciſed long before any other ſciences. But paſſing with ſilence, Apollo, Æſculapius, Machaon, Podalire, & all that ſort of gods as alſo Hippocrates, Galen, Pithagoras, Empedocles, Parmenides, Pimander, Democritus, Chiron, Pæon, Heraclides, Diocles, Cariſtus, Herophilus, Eraſtratus, Sanctus Coſmus, and Damianus two worthy Arabs, Meſues, Avicenna, Averroyes, Paulus, with infinite others Arabs, Hebrues, Greekes, and Latins, and all the ancient Philoſophers, together with Alexander the Great, Joſina the 9. King of Scotland, who lived before Chriſt 161. years, Marcus Antonius, and divers others, Emperors, Kings & Princes, which profeſſeth the ſame, it is evidenly ſhewed unto us by the holy Scriptures and prophane Writers, like as by the writs of the learned, who profeſſed the ſame, that the medicine, Chyrurgion with the medicaments was invented & approved by God himſelfe, for in the 20. chap. of the 2. book of the Kings wee read how Eſay healed, by Gods commandement, Ezechias by laying a figge on his biles and ſores: as alſo in the 6. and 10. chap. of Tobias, how the Angell commanded him to ſlay a fiſh called Caſſidill and to take the gaull thereof to the web of the eyes. In the 12. and 13. of Leviticus God commanded the Iſraelites when they entred in Capernaum, that if there appeared any ſignes of leproſie, like as puſtules

Medicines moſt ancient and honorable.

The Author of Chyrurgery.

Illiad. Lib 11.

Gen. 6.

Chyrurgery was before all other Sciences.

Joſhua King.

Chyrurgery invented by God.

2 King 20.7.

Tob 6 8 10. 11.12 13.

Lev 13.13.

of

of divers colours upon the skinne, that such should bee brought before Aaron, and rejected for lepers, by such signes as is set downe in that chapter. But what, not onely was it invented by the divine power, but in like manner expressly commanded in the 38. chapter of Eccles. and divers other places, that the professors thereof should bee honoured by all men, for God created him to the effect that he remaine with thee to assure thee, and them which are with thee, and that thou defraud him not of his wages, for God created the medicines of the earth, and the wise will not disdaine the same: for hee gave this science to man, that hee may be glorified in his mervailous workes, for hee is the curer of all things. Now seeing I have sufficiently both by the scripture and otherwise proved the excellency of Chyrurgery, it is not needfull to compare the same with other Arts and sciences, for if any Art bee praised because it was and is professed of noble men, yee may clearely perceive that the Gods, Emperours, Kings, and Princes have practised the same. If wee consider the sentence of the divine Philosopher Plato, that things good are difficile, there is nothing harder then Chyrurgery, the which will occupy a man all his life time, to seek out the nature of things pertaining thereto. If things be praised for their strength and force, what thing is of more strength then to restore man to his health, which otherwise was altogether lost: some man may perchance object to mee and alleage, that many professors of Chyrurgery, with their charmes, hearbes full of poyson, and false promises destroy many people, who would easily have recovered their health if they had given no credit to such dissemblers. I answere, that such deceivers deserve and meritt to bee grievously punished, and banished out of all Countries, as I have said in my epistle to Chyrurgiõs. I read for the restraining of such abusers that the wise Jurisconsult Ulpian in the 50. and last book of the Digests expresly defended, that any baily governor of Province, or Judge, should choose, constitute, or licence any of our profession, but to leave that to the Doctors & Masters

Eccles. 38.1.

Chyrurgions esteemed by all men.

Johannes Nazerane filius meus. mah. partic.

God cured all things.

Comparison of Chyrurgery with other Arts and Sciences.

Worthy men practised Chyrurgery.

The studie of Chyrurgery asketh long time.

Deceivers should be punished and banished. *Ulpian. lib. 50. digest.*

Professors of Chyrurgery should be licenced only.

ſters of each City, to chooſe the beſt experimented, to the end the Countrey & Cities may be the more ſafely with their families and friends committed to their charge. Juſtinian libro de geſtis inhibits any to practiſe, but ſuch as are lawfully admitted by the Maſters of the Art. The ſayd Juſtinian likewiſe ſayth, that thoſe of our profeſſion were in ſuch eſtimation, that their Wives and families were maintained in all liberty, & exempted from all publike charges, ſubſidies, tributes, impoſts, watching, warding, riding in hoſts, or inqueſts, and all other ſuch common charges, which lawes are all yet obſerved in France, Italy, & divers other civill parts. Would to God it were ſo in this Iſle, ſo God would be glorified, his Highnes ſubjects well ſerved, and honeſt men relieved of great burden; as no doubt the beſt diſpoſed doe ſo think. And ſo I end this Chapter of the Antiquitie and Excellency of the divine art of Chyrurgery.

Julin lib. de geſt. cod 10. tit. 52.

Liberties and exemptions of Chyrurgions.

Chapter II.

¶ Of Operations, and Inſtruments of *Chyrurgery*.

Interloquutors, { Peter Lowe, *Doctore of Chyrurgery*, and John Lowe, *his Son*.

Pe. YEE might have perceived by my former Diſcourſe, touching the originall of Chyrurgery, and the excellency thereof, the great deſire I have to profit you therein, and to give good example to all thoſe who would profeſſe the ſame. In conſideration whereof, I am determined to conferr with you in that matter, ſeeing leiſure doth permit mee, as alſo becauſe I am mindfull to cauſe you to remaine in *Paris* for your further inſtruction, and paſſing of the degrees there accuſtomed in the ſaid Art, for the which I will in theſe three Books following, as alſo in every generall chapter enſuing, ſet downe ſo briefly as I can, the forme and method

thod that the Doctors of Chyrurgery in *Paris* uſeth, in their first examination called the Examination tentative, where the Provoſt of the ſaid Colledge, and ſix other Maſters that hee will chooſe, will examine you exactly upon the whole grounds of Chyrurgery, according to the which forme I will beginne and demand of you, in few words, the whole principall points of Chyrurgery: but according to *Cicero*, ſeeing all doctrine whatſoever which is grounded upon reaſon, ſhould begin at the definition, to the end wee may the better underſtand that whereof wee entreat, firſt then will I aſk of you what is Chyrurgery?

Form of examination at *Paris*.

Cicero Lib. 1. Officio.

Jo. It is a Science or Art, that ſheweth the manner how to worke on mans body, exerciſing all naturall operations neceſſary to heale men, in as much as is poſſible by uſing of moſt expedient medicines. It is an old Greek word compoſed of the word *Cheir* which ſignifieth hand, and *Ergon* which ſignifieth operation. Yet no operation manall is comprehended under Chyrurgery, but ſuch as is practiſed on the body of man for healing of diſeaſes.

Pe. Why ſay you Art or Science?

Diviſion of Chyrurgery, as ſaith *Hieronymus Mantuo*.

Jo. Becauſe it is divided into Theorick and Practick, as ſaith Hieronymus Mantuo.

Pe. What is Chyrurgery Theorick?

What Chyrurgery theorick is.

Jo. It is that part which teacheth us by Rules onely the demonſtrations, which wee may know without uſing any worke of the hand, and therefore wee call it Science.

Pe. What is Practick?

What Practick is.

Jo. It is that part which conſiſteth in operation of the hand, according to the precepts in healing infirmities, as Apoſthumes againſt nature, biles, wounds, fractures, bones that be out of their naturall place, with divers other operations belonging to the worke of the hand, as yee ſhall hear in the firſt Booke.

Pe. Ere you goe further, let us know what is the ſubject of this Art?

The ſubject of Chyrurgery.

Jo. Mans body, which as Abdales the Sarracen ſayth,

the most divine and admirable thing in the world.

Pe. Seeing the subject is so excellent, it is necessary that the Chyrurgion bee learned and wise, as well for the preservation of sicknesse, as recovery of health.

How the Chyrurgion should learn his art.

Joh. It should bee so.

Pe. How ought the Chyrurgion to learne his Art?

Arist. prim. aphor. *Joh.* Arist. The Prince of philosophers counselleth us to beginn at generall things, thereafter to procéede to things more particular, from easie and facile things, to obscure and difficile, as is observed in all other sciences.

The operations of Chyrurgey. *Pe.* How many operations useth the Chyrurgion most commonly?

Joh. Five.

Pe. Which bee they?

1. To take away. *Joh.* The first, is to take away that which is hurtfull and superfluous, as to take away tumors against nature, lups, cankers, warts, and such like; to draw the water out of the hydropickes; to take away a first Finger or Toe; to draw forth a child, being dead, out of the mothers wombe; to cut a Legg being gangrened or mortifyed, and such like. Secondly, to help and add to nature that which it wanteth, as to put an artificiall eare, nose, or eye, a hand or leg, a platten in the roose of the mouth, which is needfull to those who by the Spanish sicknesse or like disease, have the roose of the mouth falling, as is set downe in my treatise of the Spanish sicknes. The third, is to put in the naturall place, that which is out of his place, as to put in guttes, the Cawle, or Nett that covereth the guts, called the *Epiplon* or *Omentum*, after they bee fallen in the *Scrotum*, *Inguen*, or *Umbilicke*; to put bones in their own place, being out of joynt. The fourth, to separate that which is contained, as apostthumes, opening a vaine, scarrifying, applying of horsleaches, ventosses, by cutting the ligament under the Tongue, cutting two fingers growne together, by cutting the prepuce of the yard, by cutting the naturall conduit of women being closed naturally together, or else by accident, as oft chanceth after wombs, ulcers,

2. To help and add.

3. To put in that which is out.

4 To separate.

ulcers, and such like. The fift, to joyne that which is separated, as in healing broken bones, bones that bee out of their place, healing of wounds, ulcers, fistuloes, and such like. 5. To joyne together.

Pe. What method is to bee observed of the Chyrurgion in working those operations? What method is to be used by the Chyrurgion.

Jo. First, to know the disease; next, to doe the operation as soone as may bee, surely and without false promises or deceits; to heale things that cannot bee healed: for there are some, who being voide of knowledge or skill, promise for lucres sake, to heale infirmities, being ignorant both of the diseases and the remedies thereof. These faults bee often committed of some, who usurping the name of Chyrurgien, being unworthy thereof, have scarce the skill to cut a beard, which properly pertaineth to their trade. Vagabonds and simple Barbers.

Pe. It seemeth by your words, that there are some infirmities pertaining to our Art, which are incurable.

Jo. There bee divers, like as Cancer occult, leprosie, elephanticke particular: also when the diseased refuse the remedie proper for the cure thereof, as to cut a member being mortified, to make incision of the hydropicke: and also when by the curing of the maladie, there ensueth a greater disease, like as to stay altogether suddainly the hemorods which have long runne, or any other naturall evacuation voluntary. (I saw in Paris a woman that had a flure of blood which flowed quarterly, sometime monethly, the which being stopped, shee dyed immediatly thereafter) to cut the varice in the leg, or else where, because the humor taketh the course oftentimes to some principall part, which is cause of death, also in healing the biles which come in the legges or armes, called *malum mortuum*. Diseases incurable. History.

Pe. What remedies then are most expedient to be used in those diseases?

Jo. Remedies palliative and preservative to let the evill that it encrease not, as wee shall intreate of each of them in their severall places. Remedies palliative and preservative are to be used.

Pe. To doe all those operations, what qualities are re-

quired of the Chyrurgion?

Celsus. *Joh.* There are divers, and first of all as Celsus saith, that hée bée learned, chiefly in those things that appertaine to his art, that he be of a reasonable age, & have a good hand, as perfect in the left as in the right, that hée bée ingenious, subtill, wise, and tremble not in doing his operations, that hée have a good eye, and good experience in his art before hée begin to practise the same, also that hée have séene and observed of a long time of learned Chyrurgions, that he be well mannered, affable, hardie in things certaine, fearefull in things doubtfull and dangerous, discréte in judging of sickneſſe, chaſte, sober, pittifull, that hée take his reward according to his cure, and abilitie of the patient, not regarding avarice.

The qualitie which are required in a Chyrurgion.

A Chyrurgion should not be avaricious.

Pe. What conditions ought the patient to have?

Jo. Divers also, and first hée must have a good opinion of the Chyrurgion, that he have a good hope to be cured of him, to be obedient to his counsels, for that availeth much in healing of maladies, that he indure patiently that which is done for the recoverie of his health.

Conditions of the patient.

Pe. Which are the Instruments that the Chyrurgion ought to use in his operations?

Jo. They are of two sorts, for some are common, others are proper; and the Instruments and remedies common, be also of two sorts, for some be medicinals, some be ferramentals.

Two sorte of Chyrurgicall Instruments.

Pe. Why doe you call them common?

Jo. Because they serve indifferently to divers parts, and may be used in all parts of the body.

Pe. Which are the medicinalls?

Jo. They consist in ordaining good regiment in things naturall, unaturall, and against nature, in letting of blood, also in applying plasters, cataplasmes, lineaments, pouders, unguents, and such like.

Good regiment.

Pe. Which be the Instrumentals ferramentals?

Jo. Some are to cut as rasors, some to burne as Canters actuals, some to draw away, as tenals incisives, pincets, triballs,

Handie instruments.

triballs, ſome are to ſound, as to ſound a wound, the Stone in the Bladder, and ſuch like: ſome are to ſowe wounds and knit Vaines and arteries, as nædles.

Pu. Which are the proper Inſtruments?

Proper inſtruments.

Jo. Thoſe which ſerve to one part onely, as in the head a trepan, with ſundry other capitalls: in the eye an inſtrument called *ſpeculum oculi*, a needle proper to abate the Cataract: in the eare a ſquirt for deafneſſe, or to draw forth any thing incloſed in the eare: ſome in the mouth as *ſpeculum oris*, or *dilatorium* for convulſion: others are proper for the pluriſie, others for the hydropſie: ſome to draw the ſtone, which are made of divers faſhions: ſome are proper for women, as *ſpeculum matricis*, ſundry are proper for the birth, as we ſhall heare in my treatiſe of the ſickneſſe of women: ſome are for the fundament, as *ſpeculum ani*: ſome for broken bones, and ſuch as bee out of their place, as *machines, laks, gloſſocomis*, as is ſet downe by *Oribaſius* in his booke called *Antidotarium*.

Oribaſius in Antidotario.

Pu. Which of thoſe remedies are moſt neceſſary to bee had alwayes with him?

Remedies that a Chyrurgion ſhould have alwayes with him.

Jo. *Arnoldus de villa nova* counſelleth alwayes to have fit to helpe in neceſſitie for things that are common: the firſt an aſtringent or retentive, to ſtay a bleeding or fluxion that commeth in any part: the ſecond is *Baſilicon*, to make matter in a wound or an Apoſthume: the third, ſome cleanſing Salve, as *Apoſtulorum* or *Diapeo*: the fourth, is to fill up a wound or bile with fleſh that is hollowe, like as *unguentum aureum*: the fift, is *cerat galen.* or *roſat meſues.* proper to appeaſe a great dolour or heat which oft chanceth: the firſt, is called *Deſiccativum rubeum*, or ſuch like, to dry and cicatrize the Skinne.

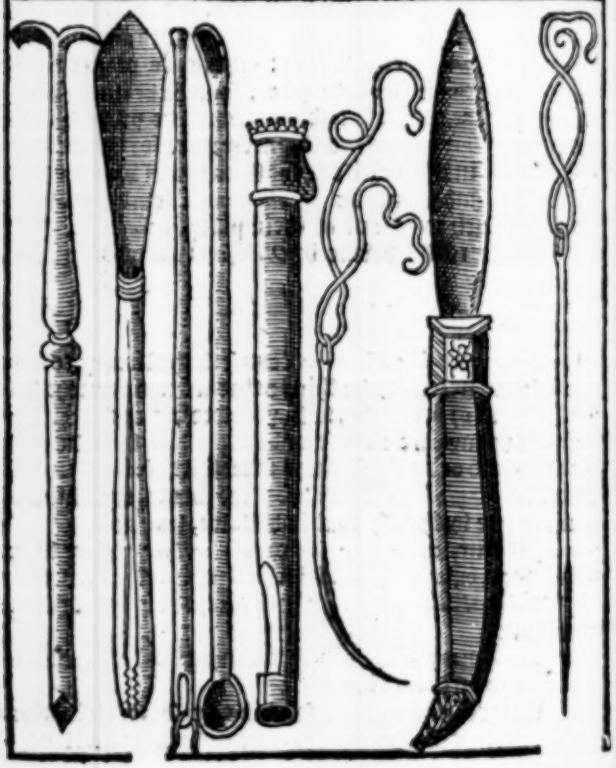
Arnoldus de villa nova.

Pu. How many kinds of ferraments ought the Chyrurgion commonly to carry with him?

Jo. Divers, as a paire of Shæres, a raſor, pincets, a lancet, a ſound, a tirball, a needle, and a cannon for nædles.

Inſtruments

Instrumentts for a little case.



Pe. How

Pe. How many things are to bee obſerved by the Chyrurgion before hee undertake any operation?

Io. According to Haly Abbas, there are five; the firſt, to know well the temperament of the patient; the ſecond, hée muſt know the ſickneſſe and nature thereof: the third, whether it bée cureable or not: the fourth, remedies proper and méete for the diſeaſe: the fift, the right way to apply ſuch remedies as bée needfull: of all thoſe hée ought to give good reaſons and authority, of ſuch famous men as have written of this Science. *Haly Abbas* in his Chyrurgery. Things to bee known of the Chyrurgyon before he begin.

Pe. In how many things conſiſteth chiefly the contemplation of Chyrurgery?

Io. In three things, according to Fuchius.

Pe. Which are they?

Io. The firſt, are thoſe things that concurr to the making and conſtitution of our body, and therefore are called things naturall. The ſecond, are thoſe things which conſerve the body from ſickneſſe, and being rightly uſed, nourish the ſame: our ancients call them things unnaturall, because if they bée immoderatly and ill uſed, they bée altogether contrary to our bodies. The third, are thoſe things indéed which are contrary to our bodies, and therefore are called things contrary to nature as Galen writeth. Contemplative Chyrurgery. *Compendium medicinæ Fabij.*

Pe. Tell mee ſomething more particularly of thoſe contemplations of Chyrurgery. 2. *Therapeutices multis alijs locis.*

Io. I am content, if your leiſure permit.

Pe. Then wee will in the next Chapter, proceed to naturall things.

CHAPTER III.

¶ Of Naturall things in generall.

Io. MAy it pleaſe you to proſecute the diſcourſe of naturall things, ſeeing wee have already intreated of

of Chyrurgery in generall, of the operations and instruments Chyrurgicall.

Pe. I like very well of this method, then tell mee how many naturall things are reckoned by the Chyrurgion?

7 Naturall things are reckoned by a Chyrurgion.

Jo. Heaven; the first is called Elements. The second, is Temperament or Complexion. The third, Humors. The fourth Members. The fift, Vertues or Faculties. The sixt, the workes and effects of Vertues. The seaventh, Spirits.

Chapter IV.

¶ Of Elements.

Pe. Seeing, according to your former division of naturall things, Element is the first; then tell mee what is an Element?

Arist. 5. metaph. cap. 3.

Jo. It is the most simple part whereof any thing is made, and in the destruction thereof, is lastly resolved.

Pe. How many Elements are there?

2 Sorts of Elements.

Jo. Two according to the contemplation of Chyrurgery, viz. simples or intilligibles, and composed or sensibles.

Pe. Which are the intelligibles?

Speculative Chyrurgery first observed by *Hippocrates*.

Jo. Those which are knowne only by speculation and judgement, the which was first observed by Hippocrates.

Pe. How many are they in number?

4 Elements. *Arist. 2. lib. de gen. & corrupt.*

Jo. They are foure, according to Arist. to wit, the fire, the ayre, the water, and the earth, the which have divers qualities, hott, colde, moyst, and dryе.

Pe. Are these four Elements otherwise distinguished?

Another division of Elements

Jo. They are distinguished also according to their lightnes and heavinesse.

Pe. Which are the light?

Jo. The fire, and the ayre, and seeketh upward by reason of

of their lightneſſe.

Pe. What are the heavie?

Jo. The water, and the earth; for by reaſon of their heavineſſe, they move downwards. Heavie Elements.

Pe. Which are the ſenſible Elements?

Jo. They are ſimilar or like parts of our body, as ſayth Galen.

Pe. How many are they in number?

Jo. Twelve, to wit, the Bones, the Cartillages, Fleſh, Nerves, Arteries Pannicles, Ligaments, Tendons, Membranes, the Skinn, the fat Greaſe, the marrow, to the which ſimilar parts, ſome add parts made of the ſuperfluitie of our body, as the Haire, and Nailes, which are alſo profitable. Twelve ſenſible Elements.

Chapter V.

¶ Of Temperaments.

§ Wherein is ſhewed the Temperature of mans body, of every Nation: and four ſeaſons of the year.

Pe. What is Temperament?

Jo. It is a mixtion of the four qualities of the Elements, as ſayth *Avicen*: or, as ſayth *Galen*, it is a confuſion or miring of hott, cold, drie, and moyſt. Definition. *Avicen.* *Galen cap 3. de complexio.*

Pe. How many ſorts of Complexions are there?

Jo. Two; to wit, well tempered and compoſed, or evill tempered.

Pe. What is temperament well tempered?

Jo. It is that which is equally compoſed of the four qualities of the Elements, of the which compoſition and ſubſtance among all naturall things, there is but one ſo tempered, which is the inner skinn of the hand, chiefly in the extremitie of the fingers, as ſayth *Galen*, and is called *Temperamentum* Temperature equally diſpoſed.

Lib. de Temperamentis.

peramentum ad pondus. There is another kind of this, called temperament *ad Juſtitiam*, which is according to Judgement.

Pe. What is Temperament *ad Juſtitiam*?

Temperament *ad Juſtitiam*, what.

Jo. It is that which is compoſed according to the exigence and dignity of nature, and is knowne by his operations, for when any thing naturally hath his operation very perfect, we eſteeme it tempered *ad Juſtitiam*.

Evill temperaments.

Pe. What is temperament, evill tempered?

Jo. It is that, in which one Element governeth and hath dominion more than other, as the hot doth ſurpaſſe the cold, and ſo forth.

Pe. How many evill temperaments are there?

Jo. There are divers, which indeed paſſe not the limits of health, for ſome ſurpaſſe the temperate in one ſimple qualitie, ſome in two compoſed, and ſo forth.

Pe. How many ſimple qualities are there?

Four ſimple qualities.

Jo. Foure, as yee have heard, hot, dry, colde, and humid: in like manner there are foure compoſed, to witte, hot and dry, hot and humide; colde and dry, colde and humide, of the which *Galen* hath openly written.

Lib 1. artis parvæ.

Pe. What parts of our bodies are attributed to theſe qualities?

Galen, Lib. de ligamentis.

The temperature of our bodies in particular, and what temperature every one is of. *Robertus Gropetius reg. ſanitat.*

Jo. To the hot, wee attribute parts moſt hot in our bodies, as the ſpirit, the heart, the blood, the liver, the kidnes, the fleſh, the muſcles, arteries, vaines, skinne, and ſplen. To the cold wee attribute the haire, bones, cartilage, ligaments, tendons, membraines, nerves, the braines, and the fat greaſe, the fleſh, the paps, the ſtones, lights, liver, kidnes, marrow. To the dry, the haire, the bones, cartilages, membraines, ligaments, tendons, arteries, vaines, nerves, the skin. Nevertheleſſe, ſome exceed others in theſe qualities, as you may perceive by their order: for it is neceſſary in healing wounds and ulcers, to know the temperature of every part, for other remedies are rather to bee uſed in hard and dry parts, than in ſoft and humid parts.

It is neceſſary for the Chy-

Pe. How

Pe. How are the foure qualities compared to the four quarters of the year?

Jo. The Spring time is hott and humid, most healthfull as saith Hippocrates, and continueth from the tenth of March, to the 11. of June. The Summer begineth at the 11. of June, and endeth on the 13. day of September, and is hott and drie. The Autumne or harvest from the 13. day of September unto the 13 of December, and is cold and dry, very unhealthfull, sickly, the which sicknesses if they continue till Winter, are most dangerous. The Winter from the 13. day of September untill the 10. day of March, is cold and humide: in this time of the year, men eat much, ingender aboundance of crudities, of the which commeth divers sicknesses.

Chirurgion to know the temperature of the patient.
Comparison with the foure Quarters of the year.
Aphoris. 19. *& prim de natura humana.*
Sicknesse in Autumne very unhealthfull.
Petrus Tuziganus de regi. sanitate.

Pe. How many wayes know yee the temperature of mans body?

Jo. Five; to wit, by the constitution of mans body; by the operations and functions; by the Countryes wherein men are borne; by the colour; and by the age which being all well considered, wee may judge of every mans complexion.

Five wayes to know mans temperature.

Pe. How know you the temperature of mans body by the constitution?

Jo. Galen saith, those which are fatt be cold, like as fattnesse is ingendred of a cold habitude: those that bee grosse and full of flesh bee hott, because much flesh is gendered of great aboundance of blood, as saith *Avicen.*

Lib. de temperamentis cap 6.
To know the temperature by the constitution.
1 *Treatise. cap.* 1.
Galen Lib 1. *de temperam. cap.* 6.

Pe. How know you the temperature of mans body by the operations?

Jo. Galen saith, that any creature, plant, hearb, is of a good temperature when they doe well their functions naturall.

Pe. How by the Nations and Countries know you the temperature?

Jo. The people towards the South are melancholique, cruell, vindicative, allwayes fearfull, they are subject to madnesse

The constitution of those towards the South.

Lib. 3. de temperamen. cap. 6.

They are subject to *Venus* games, and why.

A thousand Wives.

Bodin.

nesse and suriousnesse, as often chanceth in the Realme of Fez, Norruecos, Affricke, Ethiopia, and Ægypt, where there is a great number of mad men; they are also subject to leprosie, chiefly in Ethiopia; they be leane, pale coloured, black eyed, and are hott by the naturall ayre, and as *Galen* saith, they are also subject to Venus games, because of the melancholique spumous humor, which is the cause that the Kings of Affrica, Ethiopia, and Ægypt, have had at all times a great number of Wives, and Concubines: so that some have had three hundred or foure hundred, some a thousand, as reporteth Bodin in his common-wealth: they are subject to the falling sickenesse, scrofuls and fever quartaine; yet they are wise, modest, and moderate in their actions: they are also proper for the contemplation of naturall and divine things, they have little interiour heate, and for that cause are very temperate, because they cannot digest much meate. So wee may say, that those people being subject to greatest sicknesse and vices, are also adorned with great vertues, where they are good.

They are very temperate.

The complexion of the people towards the North, cold and humide.

They of the North are strong and cruell.

They are good drinkers.

Subject to jealousie.

The people towards the North are colde and humide, neither so wicked and deceitfull; they are faithfull and true, yet because they are of a grosser wit and more strength, they are more cruell and barbarous, they have greater force and are stronger by reason of their thicknesse and coldnesse of blood: they bee very courragious, for the great aboundance of blood, & of smaller judgement: they have great heat in their interior parts, and therefore eate well, & drink better, which is an unhappie vice: They are high in stature, great bodyed, more beautifull than those of the South, lesse given to the lust of the flesh, & lesse subject to jealousie, which is a cõmon vice to the people towards the east, as the Græks and Turkes; or West, as Spaine, and such like Countries, but principally the people of the South, from whom is come the use to geld men, whom they call Eunuchs, to keepe their Wives. Moreover, they who are toward the North, are more laborious, and given to arts mechanickes, and more proper for warres, than Sciences.

Laborious men towards the North.

The people betwixt the South

South and the North, as Italie, France, and such like, bee almost of the Northern peoples temperature, but somewhat hotter: they have lesse internall heat and force than the Northern people, but more than they of the South, & therefore decide their quarrells oftener by reason, than force. Yet it is certaine, that those of the West draw more to the qualities of those of the North: like as those of the East to the conditions of the South.

The complexion of those of the West and East.

Pe. How know you by the colour, mans temperature?

Galen de Sanitate tuenda.

Io. *Galen* saith, those which are of colour somewhat red, yellow, or blew, be of a hot temperature; those which are black, white, or lead colour, are of a cold complexion: otherwise be the four colours, red yellow, black, and white; the red is ordinarily sanguine, the black melancholick, the yellow collerick, and the white phlegmatick.

Pe. How know you mans temperature by the age?

Io. Forasmuch as there is a particular of the age, we will deferr it till we come to that Chapter.

To know the temperature by age.

Pe. By what outward markes know you every mans complexion?

Io. He of the sanguine complexion is fleshly, liberall, loving, amiable; gracious, merry, ingenious, audacious, lubrick, given to Venus game, red coloured with divers other qualities, which sheweth the domination of the blood, and it is hot and humide, and is in good health in Summer and in Winter by reason of his humiditie.

The Cholerick is hastie, prompt, and in all his affayres envious, covetous, subtil, hardie, angrie, valiant, prodigall, leane, yellow coloured, and is hot and dry, and is in good health in Winter.

The Flegmatick is fat, soft, white flæpie, slothfull, dull of understanding, heavie, much spitting, and white coloured: finally his temperature essentiall or accidentall is cold and moyst, and in good health in Summer.

The Melancholick which is either by native or accident of colour, livide, and plumbine, solitary, coward, fearfull, sad

Envious, Curious, Avaritious, Lean, Weak, Slowe, and so forth; moreover, Cold, and Dry, and are well in Harvest: as touching the complexion of every Age, you shall hear in the Chapter of Age: and as for the complexion of every part of the body, you shall hear in the poor mans guide.

Chapter VI.

¶ Of Humors.

All sickness proceedeth of some humors.

What humor is.

Pe. THou knowest that the most part of all sicknesses proceedeth and are entertained by some Humor, and sometime by sundry humors together; therefore it is most necessary that the Chyrurgion know perfectly the humors of our bodies, to the end hee give the better order for the curation of Maladies: then tell mee, What is an Humor?

Jo. **It is a thinn substance, into the which our nourishment first is converted: or it is a naturall Jutte wherewith the body is entertained, nourished, or preserved.**

Whereof humors doe proceed.

Pe. Whereof proceedeth the Humors?

Jo. **Of the juice or Chile which is made in the stomack, of the aliment wee are nourished with, changed by the naturall heat of the stomack and parts neer thereof: thereafter brought by the veines *Meseraikes* to the Liver, and maketh the four Humors which differ in nature and kinde.**

There are 4 humors.

Pe. How many Humors are there?

Jo. **There are four, which represent the four Elements, as well by the substance, as qualities, whereof every thing is made; *Galen* calleth them the Elements of the body.**

Pe. Which are the four Humors?

Jo. **The Blood, the Flegme, the Choller, & Melancholy.**

Pe. What

Pe. What is blood?

Jo. It is an Humor hot, aerious, of good consistance, red coloured, sweet tasted, most necessary for nourishment of the parts of our body, which are hot and humide, ingendered in the liver, retained in the vaines, and is compared to the ayre, as saith *Galen*. The blood nourisheth the body. 2. *De placitis.*

Pe. What is Flegme?

Jo. It is an Humor cold and humide, thinn in consistance, white coloured, when it is in the vaines it nourisheth the parts cold and humide, it lubrifieth the moving of the joynts, and is compared to water.

Pe. What is Choller?

Jo. It is an Humor hot, and drie, of thinn and subtill substance, black coloured, bitter tasted, proper to nourish the parts hot, and drye, it is compared to the fire. *Tralliani, lib. 7 cap. 16.*

Pe. What is Melancholy?

Jo. It is an Humor cold and drye, thick in consistence, sower tasted, proper to nourish the parts that are cold and drye, and is compared to the earth, or Winter.

Pe. How many sorts of Blood are there?

Jo Two, Naturall and Unnaturall.

Pe. How many wayes degenerateth the Blood from the Naturall?

Jo. Two wayes; first by some alteration or transmutation of the substance, as when it becommeth more grosse and more subtill than it should be, or else by adustion, when the most subtill becommeth in Choller, and the most grosse in Melancholy. The blood degenereth two wayes.

Secondly, through unnaturall proportion and evill mixtion with the rest of the Humors, and then it taketh divers names: as for example, if with the blood there bee aboundance of Pituita, such is called Flegmatick, if the choller of, and the Chollerick, and so forth in the rest. Whereof every humor doth proceed.

Pe. How many sorts of Flegme are there?

Jo. Two in like manner, Naturall and Unnaturall.

Pe. How many kindes of *Pituita* unnaturall are they?

2. *De differentiis fabrium. Cap 6.*

Jo According to *Galen* there are four sorts; the first called *Vitrea* because the Humor is like unto melted glasse, it is cold and proceedeth of gluttony and idleneſſe, it provoketh to vomit, cauſeth great pain in the parts where it falleth, as on the teeth, and Inteſtines.

The ſecond, is called the ſweete Flegme, becauſe in ſpitting of it, it ſœmeth ſweet, it provoketh the body to ſleep.

The third, is called bitter Flegme, becauſe in ſpitting, it ſœmeth bitter, it is cold and maketh the body hungrie.

The fourth is ſalt Flegme, it maketh the body drie and thirſtie. There are ſome who make another kind called *Giſſei*, becauſe of the forme and hardneſſe it hath like Lyme called *Giſſum*: It is often in the joynts and is reckoned under *Vitrea*.

Pe. How many ſorts of Choller be there?

Two Sorts of choller, naturall and unnaturall.

Jo. Two in like manner, Naturall and Unnaturall.

Pe. How many wayes becommeth the Choller Unnaturall?

Jo. Two wayes; firſt, when it ſpilleth, rotteth, and is burnt, and then it is called Choller *Aduſt* by petrefaction. The other is made of the mixture of the other Humors.

Pe. Into how many kindes is it divided?

Tractatu data bile & multis aliis locis.

Jo. In four, as ſayth *Galen*. The firſt, is called *Vitellina*, becauſe of the colour and thick ſubſtance: It is like the yolk of an egge, it is ingendered in the Liver and vaines, when by the unnaturall heat it doth diſſipate and conſume.

The ſecond, is called *Verricuſe*, becauſe this colour repreſenteth a Wart called *Verruca*.

The third, is called *Eruginus*, becauſe it is like the ruſt of braſſe or copper called *Aruzo*.

The fourth, is called the blew Choller, becauſe it is blew like *Azur*. Theſe three laſt Humors, as ſaith *Galen*, are ingendered in the ſtomack by vicious meats, and vill juice, which cannot be digeſted and converted into good juice.

Pe. How many ſorts of melancholick are there?

Jo. Two, Naturall, and Aduſt.

Pe. How

Pe. How many kindes of unnaturall or aduſt are there?

Jo. Two, the firſt is that whereof commeth the Humor Melancholicke, which is like the lée of blod when it is very hot and aduſt; or by ſome hot Feber, that the blod doth putrifie, as ſayth *Avicen*, and differeth from the naturall Melancholicke, as the dreggs of Wine burnt, from the unburnt. *Galen* ſaith, that Humor which is like the lées of Wine, when it becommeth more hot, it ingendreth an Humor againſt nature called *Atra bilis*, of the which no Beaſt can taſte. 14. Method.

Pe. Knowing theſe four humors and their generations, we muſt know in like manner, that in our bodies there is concoction; therefore tell mee how many kinds of concoctions are there?

Jo. There are three, as ſaith *Johannes Bacchanellus*. The firſt is made in the ſtomack, which converteth the meat we eate into the ſubſtance called *Chile* in the which the four humors are not, but potentially. The ſecond is done in the Liver, which maketh of the *Chile* the maſſe Sanguinary, as ſaith *Galen*. The third is made through all the body, of which are ingendered the four humidities, which the Arabians call humors nouriſhing, or Elementaries, as ſaith *Avicen*. The firſt hath no name, and is thought to be the humor which droppeth from the mouth of the vaine. The ſecond is called *Ros*, the which after it is drunken into the ſubſtance of the body, it maketh it humide, whereof it taketh the name. The third is called *Cambium*. The fourth is called *Gluten*, and is the proper humiditie of the ſimilar parts. *Lib de conſenſu med.* 4. *De uſu partium.* 2. *Cano. cap.* 1.

Pe. Have not theſe humors a certain time in the which they raign more than other in mans body?

Jo. Yes inoede; for the blod raigneth in the morning from three houres untill nine: in like manner in the ſpring time the Choller from nine in the morning until three in the afternoon, as in Summer: the Flegme from three in the after- What time every humor raigneth.

afternoon untill nine at night, as in autumn: the melancholick, from nine at night untill three in the morning, like as in winter, and this is the opinion of *Hippocrates* and *Galen* as touching humors. Such things being well understood, ye may know what humor raigneth in the sick, and what time he shall be most grieved

Chapter VII.

¶ Of Members and Parts.

The definition of members. *Avicen.*

Pe. WHat call you Members or Parts?

Jo. Avicen speaking of Members sayth, they are bodies ingendered of the first commixtion of humors.

Pe. How many sorts of Members are there?

Jo. Five, of the which the first is called principalls. The second, are Members that serve the principall Members. The third, are Members that neither govern, nor are governed of others, but by their own proper virtues. The fourth, are Members which have proper virtues of themselves, and also of others. The fift, is called Members excrementals, and not proper Members, as others.

Pe. How many principalls Members are there?

Jo. Amongst the parts of the humane bodie there are found four, which are most chiefe and principall, to wit, the brains, the heart, the liver, and the testicles. The first three are called principalls, because by them all the body is governed, and without them men cannot live. The fourth, which are the testicles, is called principall, because without them men cannot be procreated, saith *Galen*.

Pe. Which are they that serve the principall Members?

Parts serving the principall members.

Jo. The nerves serve the brains; the arteries the heart; the instrument Spermaticks, the testicles: by the Nerves the spirit *Animall* is carried through all the body; the spirit *Vitall*

Vitall is carried by the Arteries; the Vains serve to carry the Blood through all the body, as also to bring the *Chile* to the Liver: the instruments Spermatick for the bringing and casting forth of the Seed.

Pe. Which are the Members which neither governs, nor are governed of others.

Jo. The Bones, the Cartilages, Membrains, Glands, Tendons, Ligaments, Fat, simple Flesh, and so forth.

Pe. Which are they that have proper virtue of themselves, and also of others.

Jo. The Belly, the Kidnies, and the Matrix.

Pe. Which are the Members called excrementous?

Jo. The Nailes, and the Haire.

Pe. Are the Members no otherwise divided?

Jo. They are divided into two parts, similars and dissimilars.

Pe. Which are the parts similars?

Jo. The Bones, Nerves, Flesh, and so forth, which are so called, because the least part of them hath the same name that the whole hath.

Pe. Which are the parts dissimilars?

Jo. The Eare, Eye, Legg, Hand and Foot, &c.

Pe. Why are they called dissimilars?

Jo. Because when they are divided, they lose the name of the whole, as the Membrains of the Braines are not called Braines, nor the Membraines of the Eye, the Eye; and so forth in other dissimilar parts.

Members which have proper virtue of others and also of themselves.

Galen de differ. morb. ca. 3.

CHAPTER VIII.

¶ Of Virtues.

Pe. WHat call you Virtues?

Jo. They are the cause whereof proceedeth

Lib. 1. de facultatib. naturalib.

the actions or powers, as saith *Galen.*

Pe. How many Virtues or Faculties are there?

Jo. Three; to wit, Animall, Vitall, and Naturall, which have a certain simpathy one with another, for if one be hurt, all the rest suffer with it.

Pe. What is Animall?

Jo. It is that which commeth from the Brains, and sendeth the sence and moving through all the body by the Nerves.

Pe. How many sorts of Virtues Animall are there?

Jo. Three; to wit, Motive, Sensitive, and Principall.

Pe. Wherein consisteth the Virtue Motive?

Jo. In the Instruments that move voluntary, as the Muscles and Nerves.

Pe. Wherein consisteth the Virtue Sensitive?

Jo. In the sences externall and internall.

Pe. Into how many parts is the Virtue Sensitive externall divided?

Sensitives externall, divided into five.

Jo. Into five; Seeing, Hearing, Tasting, Smelling, Feeling.

Pe. What is the Virtue Sensitive interior?

Jo. It is a virtue that correspondeth to the five externall virtues, by one Organ only, and therefore is called Sence common.

Wherein the virtue principall consisteth.

Pe. Wherein consisteth the Virtue Principall?

Jo. In Imagination, reasoning, and remembring.

Pe. May those Virtues bee divided severally one from another?

Jo. Yes, because one may be offended without another, which sheweth them to have divers seats in the Brain particularly.

Pe. What is the Virtue Vitall?

Jo. It is that which carrieth life through all the body.

Pe. How many sorts of Virtues Vitall are there?

Jo. Two; to wit, Virtue Vitall Active, that is, in doing operations:

operations: and vertue vitall passive in suffering operations.

Pe. What is the Vertue Active?

Jo. They are those vertues which dilateth the heart, and arteries, as chanceth in mirth and love.

Pe. What is Vertue Passive?

Jo. They are those vertues which constrain and bind the arteries and heart, as happeneth in melancholick, sadnesse, and revenge.

Pe. What is the Vertue Naturall?

Jo. It is that which commeth from the liver, and sendeth the nourishment through all the body.

Pe. Into how many parts is it divided?

Jo. Into four: the first, in attraction of things proper: the second, in retaining that which is drawn: the third, in digesting that which is restrained: the fourth, in expeating that which is hurtfull, and offensive.

Pe. Doe all these Vertues doe their operations at once?

Jo. No; for first attraction is made, then retained untill perfect digestion be made: lastly, vertue expulsive, casteth forth all things hurtfull to nature.

Chapter IX.

¶ Of Actions and Operationr of Vertues.

Pe. WHat call you the Actions of Vertues;

Jo. They are certaine affections or mevings actives, proceeding of vertues.

Pe. How many sorts are there?

Jo. Three; like as Vertues Animall, Naturall, & Vitall.

Pe. Seeing the difference is not great betwixt Vertues and operations of Vertues, it is superfluous for the present to insist further in that matter?

Chap.

Chapter X.

¶ Of Spirits.

Definition of Spirits.

Pe. What are Spirits?

Jo. They are a substance subtil & aerious of our body, bred of the part most pure and thinn, of the blood sent through all the body, to the effect the members may doe their proper actions.

Pe. In what part of our bodies abound they most?

Andreas de Lorrain.

Jo. As saith *Andreas de Lorrain* they abound in the heart and arteries, in the braines and Nerves.

Pe. How many sorts of Spirits are there?

Jo. Three; Animall, Vitall, and Naturall.

Pe. What is the Spirit Animall?

Jo. It is that which remaineth in the braines, of which a great part is sent to the eyes, by the Nerves optickes, some to the eares, and divers other parts, but most to the eye: therefore those who have lost their sight, have their other vertues more strong, the wich caused *Democritus* and other Philosophers to put out their eyes, to the end their understanding might be more clear.

Democritus put forth his eyes, & why?

Pe. Is the Spirit Animall brought through all the Nerves substantially.

Jo. No, but onely by the Nerves optickes, because they have manifest hollowneſſe, and not the rest.

Pe. What is the Spirit Vitall?

Jo. It is that which is in the heart & arteries, and is made of the evaporation of the blood, and of the aire, laboured in the lights by the force of vitall heat, and thereafter is diffused through the members for the conservation of the naturall heat

Pe. What is the Spirit Naturall?

Jo. It

Jo. It is that which is ingendered in the liver & vains, and there remaineth while the liver maketh the blood and other naturall operations. The use of it is to help the concotion: and there be four things which be annexed to those naturalls, which are Age, Colour, Figure, and Kind.

CHAPTER XI.

¶ Of Age.

Pe. SEeing, heretofore wee have discourſed of things naturall and their number: it ſhall bee needfull in this place to ſpeak of ſuch things as are annexed to naturall things, beginning at Age which is the firſt: So I will demand of you what is Age?

Jo. It is a ſpace or part of our life in which our bodies are ſubject to many mutations.

Pe. Thou knoweſt that all things which are created, if they bee materiall, ſhould have an end, and that there is nothing under the heavens, except the ſoule of man, but it is ſubject to corruption and change, as all the Philoſophers grant, like as *Ariſtole*, *Hippocrates*, and *Galen* doe teſtifie; and it is certain, that wee from our birth are ſubject to divers alterations: therefore tell me into how many divers apparent mutations have our ancients divided the life of man?

Ariſt. de longitud. & brevit. vitæ.
Hippoc. lib. 1. De diæta.
Galen lib. 1. de ſanit.

Jo. In that there is found very great controverſie: For the *Ægyptians*, and *Pithagorians*, were ſo ſuperſtitious, that they did publiſh by their writs, & were of opinion, that there were ſo many Ages as there were ſignes in an hundred yeers, thinking thereby a man to live only a hundred yeers, and that every ſeventh yeer we ſhould perceive ſome notable change, beſides the particular change of every ſigne both in the temperature of the body, and manners of the minde. Yet I am of opinion, that Age ſhould not be divided according

The *Ægyptians* and *Pithagorians* opinion concerning mans life.

ding to the number of the yeares: thinking that hereupon should either depend youth, or old age; but rather after the temperature of the body: for old men that are cold and drie may be termed old; so there be many old folks of 40. yeare, and divers who may be thought young of threescore. There be some complexions that ware soone old; in other later: these of the sanguine complexion be long in growing old, because they have much heat and humiditie. The Melancholick wareth soone olde, because they be cold and drie. As touching the Feminine sexe, it becommeth sooner old than the Masculine. *Hippocrates* reporteth that women in the Mothers womb are formed in seven Moneths, and grow slowlier than men; but being borne, doe grow faster, and become sooner wise, old, or failed: for the feebleneſſe of their body, and fashion of life, being for the most part idle: and there is nothing that bringeth sooner old age, than idleneſſe and want of exercise.

Hippocrates de partu.

Pe. Is mans age no otherwise divided amongst the olde Writers?

Plato and *Pithagoras* opinion of Age.

Jo. Amongst the old Philosophers there be sundrie opinions. Plato affirmeth man to live fourscore and one years; Pithagoras only fourscore, and did divide them in twenties, comparing the ages to the four times of the year: to wit, the Spring-time, to child-hood: the Summer, to youth: the Autumn, to man-hood: and Winter, to old age.

Varro divided age five waies.

The Philosopher Varro did divide age five wayes, to wit, child-hood, to fiftéen years: from fiftéen to thirty, young men: from thirty to forty-five, men: from that to threescore, old men; from thence, they be termed very old.

The opinion of the Ægyptians and Alexandrians.

The *Ægyptians* and *Alexandrians* were of the opinion, that men did live according to the encreasing and diminishing of the heart, thinking the heart to grow till fifty years, and that every year it did augment two dram weights: and after fifty years, did ever diminish, till in the end it became to nought: Which opinion I doe not approve, because I have opened (sundry very old people, in whom I have

have found the heart as big and heavie, as in those of younger age.

The learned Philosopher and mediciner Stasea, was of opinion that men should not live long, by reason of the sundry chances of fortune and doubtfull health of their bodies, for he sayth, wee ought onely to live so long as the commodities of our life be more in number, than the discommodities thereof. *Stasea opinion of mans age.*

Pithagoras and Cicero did both accuse Nature, for giving of long life to Crowes and Harts, who were unprofitable creatures, and so short to men: To the which the Philosopher Possidonius doth agree, and sayd, that one day of a learned mans life is better than never so long of an ignorants: some doe adde another kinde of old age called *Senium ex morbo*. *Pithagoras & Cicero de senectute* *Possidonius opinion.*

The most part of our late Writers are of opinion, that the naturall course of our life indureth five speciall mutations, which they doe call ages, to wit, Infancy, Adolescency, Young age, Manes estate, and old Age: the infancy is hot and humide, but the humiditie surpasseth the heat, and lasteth from the hour of our birth till thirteene yeares, and is governed by the Moon as sayth Ptolomeus: In this time man is subject to many griefes and diseases, like as Fevers, Flures, Wormes in the belly, the Stone, Apostumes, and sundry others. *Infancy* *1. Age governed by the Moon.*

The Adolescency is hot and humide, but the heat beginneth to surpasse the humiditie: the voice beginneth to grow great in men, and paps in women, and it lasteth to twentie five yeares, which is the time prefixed for growing in height, in this time men incurre many diseases, chiefly the Statick, as sayth Gordon, and is governed by Mercury who formed the manners and wit. *2. Age hot and humide, governed by Mercurie.* *Adolescency* *Gord.*

The third age is youth, which is hot and drie, but more hot than drie, and lasteth till thirtie and five yeares, and is subject to hot feavers, frenzies, with sundry other diseases, and is governed by Venus, and ingendreth great cupiditie of lust. *3. Age hot and youthfull drie, governed by Venus.*

The

4. Age temperate governed by the Sunne. mans estate.

The fourth, is mans estate, most temperate of all, and lasteth till fifty years, and neither augmenteth nor diminisheth: in this time men are subiect to hot Fevers, Fluxes of Blood, Pluriſie, Lythargie, Phrenſie, and such like, and is governed by the Sunn, Author of wisedome and gravity.

eld age 1.

Then commeth old age, which lasteth the rest of our life, and may be divided into three. The first, called green age, which is prudent and full of experience, fit to govern Common-wealth, and lasteth to seventie years, and is governed by Jupiter, Author of wisedome and counsell.

2.

Then beginneth the second part of old age, accompanied with divers little incommodities, the heat then almost decayeth, and is cold and drie, like plants which doe become rotten and decayed: in this time man is subiect to many diseases, as Epilepſie, Lithargie, Numneſſe, and such like, as

Gordon.

saith Gord: and is governed by Saturne, then they be full of slouth, dull, froward, and uneasie to be governed.

3

Lastly, followes the third part of old age, which is called *Decrepit*, unto the which (as saith the royall Prophet) happeneth nothing but griefe and sorrow. All the actions both of body & spirit are weakened, the feeling groweth remisse, the memory decayeth, and the judgement faileth: so returneth to infancy, whence proceedeth the Greek Proverb, *Bis pueri Senes.*

Eccle. cap. 12.

This last age is set down in *Eccle.* 12. Be thou wise Salomon. With such a brave Allegorie, that nothing in the world can be found so excellent, for the which I shall set it down at large in this place.

The Allegory.

Have minde (saith hee) of thy Creator in the dayes of thy Youth, or in the dayes of adversity: Come, while the Sunne is not darkened; nor the Moon; nor the Starres; nor the Clouds retune after the raine: When the keepers of the house shall tremble, and the strong men shall bow themselves; and the Grinders shall cease, because they bee few in number; and they shall waxe darke which look out by

the

the windowes; and the dores shall bee shut without, because of the base sound of the grinding. And all the daughters of Singing shall bee abashed, also they shall bee affraid of the high things: And fear shall bee in the way: And the Almond Tree shall flourish: And the Grashopper shall bee a burthen: and concupiscence shall bee driven away: while the Silver cord is not lengthened, nor the Golden Ewer broken: nor the Pitcher broken at the well: nor the Wheele broken at the Cesterne, and Dust returne to the earth as it was, and the Spirit to God that gave it.

The explication of the Allegory.

This is the true description of the last age, which is admirable, and required a good Anatomist to expound the same; the Allegory followeth. Have mind (saith he) of thy Creator in the dayes of thy Youth, while the Sunn is not darkened: that is to say, while the eyes have not lost their sight nor the Clouds return after the raine, which is, when the eyes hath long wept, there passeth before them grosse thick Vapours like Clouds. When the Keepers of the house shall tremble: which is when the Armes & Hands which are given for the defence of man, are failed. And the strong men shall bow themselves: which is, the leggs whereupon the whole body stands, doth bow and becommeth weak. The Grinders shall cease: that is, the Teeth which breaketh and grindeth the meat, shall be decayed. And they shall war dark which look out by the Windowes: that is, when the Eyes are overwhelmed with some cataract or taye which covereth the pupill, called the Windowe of the Eye. The Dore shall bee shut without, by the base sound of the grinding: that is, the Chapps and Lips which cannot well open, and the Chanells whereby the meat doth passe, groweth narrow. And he shall rise at the voice of the Bird, that is, old people cannot sleep, but doe rise at the crow or calling of the Cock. And all the daughters of Singing shall bee abased: which is, when the voice doth decay. The Almond Tree shall flourish: that is, the head and Beard of all people becommeth all white. The Grashopper shall be a burthen: which is, when the leggs

groweth

groweth great, ſwelling, and tumified with aboundance of cold watery humors. Concupiſcence ſhall be driven away: which is to ſay, old people ſhall have little or no appetite to meat. When the Silver cord is lengthened: that is, when the marrow that goeth along the back groweth ſupple, and boweth the back forward. When the Golden Ewer is broken: that is, the heart which containeth the arteriall blood and vitall ſpirits ſhall be weakened. The Pitcher broken at the fountain: that is, the great vaine Cave, that may no more ſhoot blood from the liver, which is, the Spring that humecteth the whole body in ſuch ſort, that it ſerveth no more than a broken veſſell. The whæl broken at the Ceſtern, that is, the Nerves and bladder doth grow ſo weak, that they can no more retaine the water. When all theſe things do arrive, the duſt returneth to the earth as it was, which is, when the materiall body returneth to the earth: and the Spirit ſhall turn to God that gave it. Theſe be the beſt deſcriptions that can be given of old age, with their times and yeers, according to the opinion of our ancients.

Chapter XII.

¶ Of the entertainment of old age.

Pe. BEing earneſtly requeſted by ſome of my friends, (who are aged and ſickly) to preſcribe ſome forme of regiment for the better entertainment of their life, which I am willing to doe, although it bee more medicinall than Chyrurgicall: Yet in reſpect of their infeatie, and the great number of aged people in their Countries, who may not at all times have the counſell of the learned; for the which cauſe I thought good to ſpeak ſome thing briefly of that matter:

matter: And therefore I will demand of you, how many principall rules were necessary to bee observed by old people in their dyet?

Jo. Eight.

Pe. Which bee they?

Jo. The first is, that they never eat till they find some little appetite, for then meat is most agreeable to the stomack, and will better digest the evill meat having some appetite, then the best meat having no appetite, as at length is set down by Hippocrates. *Lib 2. Aph. 38.*

The second rule is, that the meat should be well sodden and chewed before it be let down, otherwise it chargeth the stomack too much, and troubleth the concoction, not being cut small with the teeth or knife, which being done, advanceth the first digestion. This is the reason that they that have many teeth live long, as saith Hippocrates. *Lib 2 epid. sect. 6.*

Thirdly, they must be very wary to overcharge their stomack, but ever rise from the table with appetite to eat more, for in over much charging the stomack, the naturall heat is weakened. Hippocrates saith, a man should never eat till he be full, neither busier to exercise; for moderate travell excitates the naturall heat: so, very necessary for all people to be used before meat. *Petrus Luxiganus. 6. epid.*

Fourthly, that they eat only of one or two sorts of meat at once, otherwise it troubleth the stomack, for all meats are not of one qualitie, and some digest sooner than other: besides, the eating of divers meats and sundry sawces, provoketh much drink, which is an hinderance to the digestion, as saith Hippocrates, Plutarch, Plinius, and Macrobius, who were of opinion, that one sort of meat is best, and of most easie digestion. *Petrus Luxiganus de sanit. Plutarch, Plinio, Macrobio. 6. epid. 3. Sect.*

Fifthly, there ought an order to be observed in eating, and those meats that digest easiest, should first enter into the stomack, like as pottage, prunes, and such other, as hath the virtue to lose the belly; grosse and rude meat should last be taken.

The firſt, they ſhall eate more at ſupper than at dinner; provided, they be not ſubject to catars, and diſtillations, and that becauſe there is more time betwixt the ſupper and dinner, than between dinner and ſupper, to digeſt and diſtribute the aliment through the body: for certain it is, in ſtirring the heat retyreth to the center, ſo it digeſteth the better: beſides, all digeſtion would have reſt, and ſo it digeſteth the better.

Seventhly, that which they eate ſhould be of good nouriſhment, and eaſie of digeſtion, abſtaining from all groſſe, viſcous, windie, flegmatick, and melancholique meates, by reaſon old people having the naturall heat cold, diſſipate not the groſſe ſuperfluitie eaſily.

Eightly, that they be nouriſhed oft and little at one time, which is meet to be obſerved both by old and young, as is at larg ſet down by Galen, ſpeaking of Antioch medicitiner, and Telephus grammariour. According to theſe rules, we finde the old mediciners, as Hippocrates, Galen, and Avicen have ever practiſed. Galen remarketh that the Athlits eate fleſh never but at night. Ariſtoxenus writeth, that the Pithagorians eate only at dinner a little bread and honie. Philemon the old writer ſaith, that the Greek ſouldiers at Troy took four meals a day; the firſt three, only a little bread and wine, and at night a little ſwines fleſh. Theſe rules ſhall be ſufficient in this place, in reſpect we are to ſpeak hereafter (of the nouriſhment moſt proper to be uſed and to be abſtained both by old and young) at length in the Chapter of meat and drink: as alſo concerning the aire and exercile, ſhall be ſet down in ſundry Chapters in the ſecond Treatiſe of this Book.

3. *Galen* conſerv. health. *Hippocrates.* *Galen.* *Avicen.* 5. conſerv. of health. *Ariſtoxenus.* *Philemon.*

Vide lib. 2. *cap.* 2.

Vide 2 treatiſe *cap.* 2.

CHAPTER XIII.

¶ Of ſuch remedies or helpes as ſhould bee uſed by old people.

Pe. SEeing age is ſubject to ſundry inconveniences and diſeaſes, I would fain know certain remedies for correcting and helping of the ſame? The diſeaſes of old Age.

Jo. **They be ſo many in number, that it will be tedious to preſcribe remedies for them all.**

Pe. I will ſhew you thoſe which I have found moſt commonly in thoſe people, like as conſtipation and hardneſſe of the belly, flowing, ſtopping, or binding in the breaſt, weak, ſalt and bitter humors, whereof proceedeth great aching, heat, and acrimonie in the making of water, much winde, with univerſall faintneſſe, by reaſon of the weakneſſe of the ſtomack, and the decay of naturall heat, ſubject to many defluxions, ever ſpitting coughing, and watering at the eyes. For the which affections I would preſcribe ſome familiar and weak things: for ſtrong and violent things muſt not be uſed to ſuch people. Strong and violent things muſt not be uſed by old men.

Jo. **As concerning the hardnes of the belly, divers things may be preſcribed, yet I find broth moſt familiar, which may be made diverſly: like as to take the tender leaves of Mallowes, Percurtall, and of the Barbary tree, Beets, Horſehoof or Colts-foot, with a few Prunes Damask: let all be well purified and ſodden with a ſoft fire, a peece of Veal or Mutton, and take a draught of that in the morning next your heart: or you may make a broth of Ozemeall, or Colwod, with a little oyle *de Olive*. But for the wealthier ſort, may be made thus, which is moſt good: Take an old Cock and pull him quick, kill him and bruſe him well, pull out the guts, and waſh him twice with white Wine, then fill up his belly with Perſeley rootes, leaves of Burridge, and** Broth for the wealthier ſort.

Bugloſſe, Pimpernell, Mercurie, Spinnage, Figgs, Raiſons, Plowdamas, Dates, Hiſſop: ſeeth all at a ſoking fire till it be well ſodden, take of the broth a reaſonable draught three mornings together. It hath the virtus to loſe the belly, it cleanſeth the paſſages of the water, and giveth breath. Cliſters and ſuppoſitours were neceſſary ſometime to be uſed. For the heat of the Water a little of Caſſia were good, and ſometime a little Turpentine waſhed in Roſe water, & taken with white Wine, it being firſt allayed with the yolk of an egge. It may be likewiſe taken in pilles the form whereof ye ſhall hear in the poor mans Guide.

Remedie. for the oppreſſed ſtomack with winde.

As for the weakneſſe of the ſtomack, and wind that oppreſſeth the ſame, confected ginger, ſuger, aniſeeds, cannell, carroway confected, are good: or tablets of *Aromaticum roſatum*, Cannell water, ſpirit of aniſeeds and cloves. To help the naturall heat, externall & internall things may be uſed, as capps of capitall, powders for the brains, amongſt the which, cloves is beſt, plaſters of Unguents, and pore on the heart, unctions on the ſtomack, or the weight of two crowns of Amber-greaſe in a new layd egg, *Therima & Methidate*, confection of *Alcermis* imperiall water: the formes thereof are common, ſo not neceſſary to be ſet down in this place.

Chapter XIIII.

¶ Of Colour, Figure, and Kind.

Pe. What proceed the Colours?

Jo. Of juſt proportion of the humors, which rule doth governe in mans body: as if there be a juſt proportion of the four humors, the colour is red: if abundance of melancholique humor, it is livide and black: if abundance of Choller, the colour is citrine and yellow: if phlegme, the colour is white and pale.

Pe. What

Pe. What is figure, or habitude?

Jo. It is a thing that sheweth the temperature whereof the body is compoſed.

Pe, How many ſorts of figures are there?

Jo. There are foure; the firſt is called Quadrature, which is of good temperature. The ſecond is Craſsitude or thicknesſe, and sheweth exceeding heate and humiditie. The third Extenuation, which is hot and dry. The fourth is very fat, proceeding of exceeding coldneſſe and humiditie.

Pe. What is a Sex?

Jo. It is nothing but a diſtinction betweene man and woman; the man is of a hot temperature, but the woman and Eunuches are cold. The temperature of man and woman.

Pe. Is it a generall rule that men are hot, and women cold?

Jo. No, for *Galen* ſaith, that it is poſſible to finde women of more hot temperature than men, but ſeldome: And ſo we end naturall things, wherein conſiſteth the conſtitution of mans body. *Lib. de pulſib.*

The second Book.

Of Unnaturall things:

The consideration whereof is most needfull for the preservation of health; and containeth six Chapters. By PETER LOVVE Scottishman

CHAP. 1. Of the Ayre.
2. Of Meat and Drink.
3. Of Mooving and Exercise.
4. Of Sleeping and Waking.
5. Of Repletion and Evacuation.
6. Of perturbations & passions of the minde.

Pe. HAving spoken sufficiently of naturall things, which are proper for the constitution of mans body: Now, in like manner it is necessary, that wee goe forward with those things which are called unnaturall things, and conserve the body, if they be rightly used; and if otherwise, they destroy the nature and health of mans body, as saith *Avicen*, Prince of the Arabians, and therefore

Avicen.

therefore are called unnaturall things : of the which I would very gladly know the number ?

Jo. **There are six ; To wit, the ayre that goeth about us, the meat and drink wee use, the motion and rest of our bodyes, sleeping and waking, repletion and evacuation together with the perturbations of our minde.**

Chapter I.

¶ Of the Ayre.

Pe. SEeing the Ayre is so needfull to us, that no health may bee maintained, nor no defection cured without the same, as wee see by the continuall inspiration, that all naturall creatures draweth for their refreshing, as also for the regendring of the spirit Animall. In like manner, the Ayre may alter our bodies in three manners : to wit, by qualitie, substance, and mutation, as yee shall read more at large in the poor mans Guide, and is no lesse profitable, and necessary to our life than respiration, without the which wee cannot live a moment, as saith *Galen*. Therefore I would know of you what Ayre is ?

Nothing can live without the ayre.

6. Method. & 8 de Placitis Hippocrates. Platonis.

Jo. **It is the matter of our respiration.**

Pe. How many sorts of Ayre is there ?

Jo. **Two ; to wit, that which is good, and that which is evill.**

Pe. What call you good Ayre ?

Jo. **That which is pure, clean, thinn, exempt from evill evaporations, deep valleyes, clouds, rotten smells, farr from stinkes, mosses, caverns, carrions, and all corruption : such ayre is best against all sickness, as well for the preservation of health, as curing of sicknesses, as saith *Cardanus*.**

Pe. What is evill Ayre ?

Lib 1. de difficultate spiran.

Io. It is that which is contrary to the other, thick, rotten, neer hills, mosses, stinkes, the Sea, and all such Towns as be low and close, infected with evill savours, or scituated betwixt two hills or places where passeth the filth of Towns: also that which is nebulous, and commeth from stinking breaths, also by the celestiall influence, as saith *Hipocrates*. In like manner, that which is exposed to the South winde, & the ayre which is inclosed in close houses for a certain time, which becommeth mouldy and putrified, because every thing that is hot and humide and wanteth ventilation, becommeth putrified. The great Towns neer the Sea, as often we see in the end of autumn and Summer great maladies, and dangerous, sometime the Plague, as writeth *Cardanus*: for it entreth into our bodies by the mouth and nose when we breath, of the which often are ingendered maladies very difficult.

Henricus Ranzovius lib 7. de conserv. Valetud.

Lib. de subtilitate.

Pe. Whereof proceedeth the varietie of the qualities of the Ayre?

Io. Of three things, like as of Regions or Countries, of wounds, and of the scituation of the place where we are.

Pe. How proceedeth the varietie of the Ayre by the Countries?

Io. There are some which are evill tempered, and others well tempered, according to the climate where they are scituated, like as under the Pole Artick and Antarctick the far distant Sunn beams, which maketh the temperature extream cold, for the which it is uninhabitable: yet there are some inhabited, as Scithia and other such Countryes, under the equinoctiall line: The intemperature is so extream hot, because of the right reflexion of the Sunn, especially betwixt the circle Artick and Cancer: Like as in the Antartick and Capricorn the ayre is more temperate, chiefly in the midwest according to the approaching of the Sunn, as we see in the four seasons of the year. *Cardanus* saith, that those countries which are mountainous are most temperate, and that a man may live an hundred years in such places.

Cardanus, lib. artis parvæ.

Plinie

Plinie saith, that Hen, Beasts and Trees, are farre stronger and more barbarous in hillie parts, and that for their great libertie. Those which dwell in the lower parts and vallies, are more effeminate, as saith *Titus Livius*. *Plinius.* *Titus Livius.*

Pe. Seeing the ayre is so necessary for the curation of maladies, is there no way to alter and accomodate it by art, to the sickneſſe?

Io. Yes verily, and for this cause *Hippocrates* counsaileth in maladies cronicall, to change the ayre and countrey, and maladies comitiall, to change the ayre, countrey, and nuriture.

Galen counsaileth those who have Ulcers in the lights, to dwell at Rome, because there the ayre is very drie, in common sicknesses we help the ayre somewhat by art, like as in fevers, which are hot and dry, we chose a house which is cold and humide: Divers windowes for the eventilation thereof, or winds made by art, also by casting cold water through the house, by spreading and strewing of flowers and branches of trees which are cold and humide, like as Violets, Roses, wilde vine berry trees, and such like: Also beware to have many people in the chamber, as counsaileth *Cardanus*. *Cardanus lib. 5. artis parvæ.*

But when the sicknesses are cold and humide, as fevers putrified, catarres, hydropses, tumors pituitous, we chose houses which are hot and drie. Also to spread and straw flowers hearbes, branches of trees which are hot and dry, as commonly Sage, Lavender, Marjoram, Spinnage, and such like.

Under the signification of the ayre in this place, wee understand all manner of windes, little and great, the which is most necessary to be considered, because they doe not only alter and change the body, but also the spirit. It goeth by the nose to the braine, by the mouth to the heart, by the pores of the shinne and meeding of the arteries, through all the body, It furnisheth the aliments to our spirits: For this the divine *Hippocrates* noteth, that the good and evill

disposition

disposition of our spirits and humors, dependeth upon the constitution of the ayre and winds. For we see where there is great trouble and variety of winds, the people are arrogant, difficult to be governed, and very cruell.

Pe. Seeing that of the wind those accidents fall, let mee know what is wind?

Hippocrates. *Jo.* *Hippocrates* saith, it is no other thing but an unstable motion of the ayre, the which being stirred by some motion it purgeth.

Pe. What nature is it of?

Jo. It is hot and drie, like as it is made of an exhalation hot and drie.

Pe. How many divers sorts of winds are there?

Jo. There are four principall, to wit, *Eurus* from the East, hot and drie, : *Zephyrus* from the West, cold and humide : *Auster* from the South, hot and humide, putrifactive, it passeth by the sea Mediterrane : *Boreas* from the North, cold and drie, resisting against putrifaction.

Arist. attributeth two collaterall to each of those four, and so in all maketh twelve; some make two and thirtie, like as the marriners, but the contemplation of these matters is not much requisite in a Chyrurgion.

Bodin. *Bodin* saith, in his Common-wealth, that the winds make great variety in us, for in countryes where the wind is violent and great, the people are turbulent in spirit: and there where the winds are not so violent, the people are of a more quiet spirit.

Pe. What mean you by scituation or place?

Jo. I mean, as to be scituated towards the sea, stinkes, douls, mosses, and such as you have heard. Also those who have no other aspect, but either to the South which is humide and putrifactive, or to the West which is cold and humide. Also to be dwelling in ground which is fatt, the aire is hot and humide; and in ground that is full of sand, hot and drie.

Titus Livius. *Titus Livius* saith, that the places change the nature of our bodies,

bodyes, as those which dwell in mountains differ from those which dwell in lower places: Also saith he, those Countries which are fertile, the men are ordinarily cowards, given to lust: the Countries and places barren, the people are more hardy and ingenuous, quick spirited.

Arist. saith, those that dwell in cold Regions, are proud, cruell, and barbarous in their manners, very strong: in hot Countries they are wise, and more fearfull those which dwell in low Marish Countries, are dull, fatte, the which proceedeth of the disposition of the Ayre.

Chapter. II.

¶ Of Meat and Drink.

Pe. Seeing the Aliments are no lesse to bee considered for the preservation of th health, than the ayre; it is therefore necessary to know what is aliment, with divers sorts thereof?

Jo. **Aliment, is that which augmenteth and nourisheth our bodies.**

Pe. How many kinds of aliments are there?

Jo. **There are divers sorts: flesh, fish, hearbs, fruits, corne, drink naturall and artificiall, condiments simple and composed.**

Pe. Are they all used after one intention?

Jo. **No, they are of divers natures, and must be used in divers manners, according to the temperature of the body,** as writeth *Cardanus*.

Pe. What sort of nouriture ought wee to use most commonly?

Jo. **That which nourisheth well, ingendereth good juice:** of the which *Galen* hath written in his bookes of the Faculty of Aliments, and in the bookes of Conversation of health, as also *Galen lib. de facul. alimen.*

also *Hippocrates* in divers places.

Pe. In the using of Aliments, how many things are to bee observed?

Trallian. lib 7. *Jo.* Nine; to wit, the goodnesse, quantitie, qualitie, use and custome, appetite, order, hour, age, and time of the year.

Pe. First then, wee must consider, that hee who would have his body entertained in good health, must use meats of good nouriture or aliment: Then tell mee what is aliment which ingendereth good juice?

Jo. It is that which is light of digestion that nourisheth well, maketh little excrements, and ingendereth good blood, as saith Cardanus, such as Capons, Patridges, Larkes, Veal, Mutton, Kidds, yolks of Egges, Fesants, Quailes, Mortoralls, all mountain birds, being larded with sage or hissope: Also some kind of fishes may bee used, as witnesseth Cardane; such as Soles, Trouts, Guggins, Perches. Good bread of wheat, that is neither over-new, nor too stale, as counsaileth Avicen: for over-new and hot bread doth digest ill, altereth the body, and ingendereth obstructions, sending vapours and fumes to the head. And being too old dryeth too much, and remaineth long in the stomack. In breaking of this bread, it were good to mixe some powder of Carway, Fenell, or Annis-seeds, specially for such as are evill disposed and weak stomacked. Such as bee well disposed, oftentimes evil bread or drink commeth in good season, like as it happened to King Ptolomie wandring through Ægypt, who did eate of sheapheards bread, which hee did esteem the best bread that ever he did eat. Likewise, Darius flying from Alexander, and being sore thirsty, did drink muddy water, wherein had been thrown a great number of dead carkasses, yet hee thought with himself that hee never did drink better drink.

Lib 3. de sanitate tuenda. *Lib. 25. cap. 27.* *King Ptolomie* *Darius.*

Pe. What drink is meetest to bee used?

Jo. Good clean wine that is of good colour and taste, moderately taken, for it hath the virtue to nourish, strengthen, comfo-

corroborate the naturall heat, tempereth the humors, and purgeth both by sweat and urine, giveth appetite, helpeth the facultie concoctrir, and maketh men joyfull; and old wine is best being hot in the third degree, & new Wine in the first degree. The strongest Wine hath most heat, and the swetest Wine unhealthfull. Yet burnt wine that is boyled with sugar is very good for old weak people, who have their naturall heat decayed, it nourisheth in those good blood but Wine must be moderately taken by all men, for being over largely taken, it hurteth the engine with the whol senses of the body, weakneth the same, and rendereth it dull and hebet, debilateth the Nerves and braines, provoketh trembling and shaking of the members, spasme, apoplexie, palsie, and oftentimes sudden death: so it is meetest both for body and goods, to be moderatly taken.

Hemicus Ranzovius de re-cte valetud.

But, because every Countrey or Nation doth not affoord wine, therefore in stead thereof we use Hydromell, composed of water and hony: or Ipocras made of water, white-bread, sugar, with a little hony: or Misen made of water, Barley, Licourish, and a few Prunes boyled together. Also Bær and Ale that is old, clean, and well made, which is now our ordinary drink.

Pe. Have our ancient writers made any mention of Ale?

Jo. Galen or *Hippocrates* hath made no mention; yet I read, that the old Arabians did estæm much of it, and invented divers formes of compounding it, yet much different from our form.

Avicen, Averroes, with divers others, but especially *Magninus Mediolanensis* hath largely written of it: saying, it hath great force to quench thirst, lose the belly, temper the body, and provoke sleep, and is as necessary as meat, both to humect the body, and restore that humiditie which is dissolved, as also to put down grosse meats to the lower parts of the stomack.

Avicen, Averroes.

Maginus his regiment of health.

Hemicus Ranzovius in his regiment of health.

Pe. What sort of grain is Ale most commonly composed of?

Jo. Of Barley, Oates, or Wheat; but according to the diversitie

diverſitie of the grain, it is of divers qualities: that which is compoſed of Barley and Oates, doe leſſe nouriſh, and ingendereth fewer obſtructions and ventoſities, than that of Wheat. And that Ale which is moſt groſſe and thick, is worſt: that which is thinn and clear is healthfull, yet it is more groſſe than Wine, and more harde to digeſt. Alſo it maketh more obſtructions: that which is new made, doth engender inflamations, wind, vapours, and dolour of the head, ſpecially being immoderatly taken; but being moderately taken it digeſteth well, nouriſheth much, and maketh people fatt.

I find that our ancients in default of other graines, did make their drink of the grain called *Lolium*, in the vulgar language called Raye or Darnell, it groweth commonly among Wheat, and of all thoſe graines it is the worſt. It provoketh great dolour and giddineſſe of the head, hurteth the Nerves and ſinewes, as ſaith Ovid and Virgill.

Ovid. 1 Faſto
Virg. 1. Geor.

Infelix Lolium, & Steriles diminantur Avenæ.

Pe. Which are the elements that ingender evill humors?

Plinius lib. 18. cap. 7.

Jo. All ſuch as are of evill digeſtion, like as Bacon, yet *Galen* greatly commendeth it for the ſimilitude it hath with humane fleſh: but it hath been found by experience, that the great uſage thereof ſometime cauſed leproſie, becauſe as is alledged, ſome ſwine among all other beaſts are moſt ſubject to that ſickneſſe, for the which, as ſaith *Tertullian* and *Baptiſt Mantuan*, *Moſes* did forbid it to the Jewes, becauſe they were already ſubject to that ſickneſſe. Salt Beef is alſo found unhealthfull, as alſo Harts fleſh, Hares, Rams, Goates, Geeſe, and all ſorts of water Fowles. Cheſe, Fruit, all ſort of *Ligumena*, with all ſorts of bread, except that which is made of Wheat, as writeth *Galen*. As touching the proprietie of every ſort of aliment, ye ſhall hear at larg in my Treatiſe intituled, The poor mans Guide.

Tertullian. Baptiſt. Moſes. Henricus Ranzovius de conſer. valetud.

Gal lib de bono & malo ſucco.

Pe. What mean you by the qualitie of meat?

Jo. That we never eate more than contenteth nature, and not

not according to appetite. *Hippocrates* counselleth a man who will live in health, not to fill himself too full of meat, neither be slow to exercise and travell, in so doing he shall seldome be sick: for as *Cicero* and some other old writers say, that we should eate to live, but not live to eate, as many doe now adayes, like as the one half of the people doe burst with morning drinks, break-fastes, dinners, afternoons drinking, supper and collation: so that they give no leisure to nature, to digest that meat which they have formerly taken, which both wracketh their bodies, and offendeth God by such gluttonie: the other sort of people be half hungry, who labour and travell sore, yet we doe see they be lesse subject to sicknesse, and live longer. *Possidonius* saith, that intemperancy and gluttony feebleth the body, dulleth the minde, and bringeth soon old age, whereof proceedeth this saying, *Hippoc. Aph.* *Cicero.* *Possidonius.*

Many more persons by gluttony are slain,
Then is by warr, famine, or other pain.

For, saith he, there is no riches nor treasure so great, which in small time may not be swallowed up in their bellies, & at last bringeth man to servitude. *Cato* forbiddeth feasting and banquetting for divers respects: First, it is chargeable, and uncertain whether it purchaseth the favour of him who is bidden, or displeasure to those that are not bidden, with divers other discommodities which are set down in the methode of Civill Policie written by the Bishop of *Castane*. *Cato.*

Pe. Is there alwayes a just measure to bee observed in meat?

Jo. No, for in those which are well we use according to their temperature; and in the sick according to the diversitie of the sicknesse.

Galen doth counsell in long sicknesses, the sick to use a more large dyet; and in shorter sicknesses a lesser dyet, and when the sicknesse is in the vigor or force, there must be a very spare dyet, used, as saith *Hippocrates*. *Gal lib.* *Glaucon.* *Hippoc 3. Aph.*

Cardanus is of opinion, that every man should eate but little at once, for the concoction is the better made, and fewer *Cardo lib. 1 de sani tuend.*

fewer superfluities and excrements will remain.

The old Romans were accustomed at certain times to supp in their open closes and courts, to let the people see their great sobrietie.

Pe. What doest thou observe touching the quality of meat?

Jo. In those people which are well, according to their temperature: and in those which are sick, according to the diversitie of the disease: in children, aliments that bee hot and humide: in hot diseases, cold meats: and in cold sicknesses, hot meats, and so forth.

Pe. What doe you observe touching custome or use?

Jo. Custome should be observed; for as saith some of our ancients, custome is a second nature: we see, that which is accustomed, although it be not over-good, yet is needfull to be observed: and if it be altered, it must be done by little and little, as saith *Hippocrates*. I have divers times in other Countries seen men become sick, by changing of their aliment and custome. *Hippocrates* doth counsell us to eate of that whereunto we have best appetite, although it be worse than that whereunto we have no appetite: for it is better saith he, because the stomack doth more quickly and better digest it, than that we take unwillingly.

Hippoc. 9 Aph. 6

Hippoc. lib. 2 Aph. 3

Pe. Thou knowest that good order is to be observed in all things, and chiefly in meat and drink, for the great effects that ensueth of them: then tell mee what order should be used in eating and drinking?

Jo. Cardane counsaileth us, to eate that first which is easiest to be digested, otherwise we force our stomack. *Hippocrates* doth counsaile us, to use light and humide things in the morning, to open the belly: and such things at night as nourisheth the body: And it is best ever to eate before ye drink, for the digestion is best wrought in so doing.

Cardan. Lib. de sanitate tuenda.

Hippoc. Lib. de Victu in morbis acutis.

Pe. Is there any time observed when man should eat and drink?

Jo. It is alwayes best after some exercise, and then to eat moderately, the exercise helpeth the digestion, and augmenteth

teth the naturall heat: in ſick folks, the time is obſerved accoꝛding to the foꝛce of the ſickneſſe and cuſtome of the diſeaſed. Yet in the beginning of the exceſſe, it is beſt to be very ſparing in eating and dꝛinking, except in great neceſſitie; ſoon after meat it is beſt neither to wꝛite, read, noꝛ uſe any pꝛofound meditation, foꝛ ſuch things returneth the naturall heat which ſhould be occupied in digeſtion.

Pe. What obſerve you touching age?

Jo. I obſerve in childꝛen humid aliments are beſt, foꝛ in uſing of ouer-dꝛy meats, you dꝛie up the bodie, and ſo hinder the growing. To young men who are exceeding hot and dꝛie, aliments of contrary qualities muſt be uſed, like as to old, who are cold and dꝛie, we ſhould uſe meats that humecteth the parts ſolide. In like manner, yong people ſhould eat oftner and moꝛe than old, becauſe they haue abounꝺance of naturall heat. *Hippocrates* ſaith, that old people faſt eaſily; next, thoſe who are of manly age; then adoleſcency and young men; but laſt of all childꝛen, foꝛ long faſting heateth the blood. *Hippo. aphor.*

Pe. What diſtinction make you touching the time of the yeaꝛ?

Jo. In Winter which is cold and humid, we ſhould uſe meats hot and dꝛie, and in greater quantitie than in Summer, and dꝛink little and good: in the Spꝛing time which is hot and humid, we ſhould eat leſſe and dꝛink moꝛe, but weaker, uſing meats of good nouriſhing: In Sommer, which is hot and dꝛie, wee muſt uſe meats cold and humid, diminiſhing the eating, and augmenting the dꝛink, moꝛe than in the Spꝛing. In Autume, which is cold and dꝛie, wee ſhould begin to eat a little moꝛe, and dꝛink leſſe than in Sommer oꝛ Spꝛing time.

Pe. What is drink?

Jo. It is any liquoꝛ which appeaſeth the thirſt, and mixeth the meat in the ſtomack.

Pe. What is thirſt?

Jo. It is an appetite of a thing cold and humid: foꝛ the

drink doth humect and refresh either actually present, or potentially to come. *Plinie* saith, that hot drink is contrary to nature, and we must not drink so soon as we be set down at the table, for that doth move and augment catarhes and distillations, and drinking when wee goe to sleep doth the like.

Here we must observe in drinking that we never drink so much till it swimm in the stomack, as divers doe now adayes, who drink for pleasure, of whom *Crinitus* hath made mention: saying, the first draught quencheth the thirst; the second, maketh man joyfull; the third, drunk; and the fourth, putteth him clean out of his sences.

Crinitus of Drunkards.

Macrobius.

Macrobius maketh mention, that eating doth make a man quiet, and drinking causeth men to clatter. Drink moderately taken, hath three offices: first it helpeth the digestion: secondly, it mingleth the meat in the stomach: thirdly, it bringeth to the liver, vains, and arteries. Of it, there be two sorts, the one doth nourish, like as Wine, Beer, and Ale: the other doth not, as water.

Pe. What kind of hearbs are meetest to bee used?

Jo. The Arabians doe commend Sage, Mint, Margerum, Rosemary, Pimpernell, Carway, Fennell. *Atius* permits Colwort, or red coal, but hee defends Leks, and Onions, because they are vaporous: hee forbiddeth also cold hearbs, such as Lettis, Poppie, and others of that quality.

Atius.

Chapter III.

¶ Of Mooving and Exercise.

Pe. What mean you in this place by mooving?

Jo. All kind of voluntary exercise, as, labouring,

bouring, running, ryding, playing, wrastling, leaping, daun-cing, and fencing.

Pe. Doth those exercises bring any commodities to our bodies?

Fo. In right using of them, there commeth great commoditie for the preservation of health, and in evill using of them, great and perilous accidents. *Hippocrates* saith, who desireth health, let him not be dull to labour, for a man may not be healthfull, if he travell not to dissipate the extremities of the third digestion, that is much recommended by *Galen*: but he blames all exercise that mooves the body unequally. *Hippocrates.*

Pe. What particular commoditie have we of exercise?

Fo. It helpeth the naturall health, it quickneth the spirit, it openeth the pores of our body whereby the excrements are consumed and wasted, it comforteth all our members, it confirmeth the inspiration, and other actions of our bodies. *Roberti. 9. c. perius regi. sanita.*

Pe. What time is most meet for exercise?

Fo. It is best before meat, or long time after meat, for the stomack being full of meat, it hindreth the digestion. *Fauchius* reporteth, that the schollers of Almaine play immediatly after meat, which causeth them to be full of humors, crudities, scabs, and ulcers, *Hippocrates* saith, that labour, meat, drink, sleeping, playing, and women, ought to be moderately used, like as all other exercises, the exercise should be afore or long after meat, as ye have heard when the digestion is perfect in the stomack and vains: if otherwise it be used, there gathereth abondance of crudities and chollerick humors: the exercise duely done, it purgeth the body of many excrements: the exercise ought to be done in this manner, after ye rise in the morning ye shall walk a little, to the end that the excrements of the first digestion may fall into their intestines and those of the second into the bladder, that done, spitt out all in the mouth, throat, and stomack, wash thy hands, face, and eyes, with water of Eye-bright mixed with white Wine, use frictions on the thighes, and leggs downe, ever to divert the vapours which *Tab. 2. comment. medic.*

aſcend, write not, nor read preſently after meat, rub your face with a rough cloth, to cauſe it to exhale and diſſipate the vapours which are aſcended.

Pe. What ſayeſt thou touching reſt?

Jo. Like as exerciſe duely uſed, hath great force for the conſervation of health: ſo on the contrary, much reſt not only dulleth the principall inſtruments of our body, but alſo of our mind, as ſaith the Poet.

Varians ſemper dat otia mentem.

It maketh many crudities, and thereupon great abundance of great humors. *Galen* reckoneth idleneſſe to be the cauſe of many cold maladies, as alſo the mother of many miſchiefes, the which were too long to recite in this place.

Chapter IIII.

¶ Of Sleeping and Waking.

Pe. What is ſleep?

Li. 1 Symptom. cauſis Paul. Ægin.

Jo. Galen ſaith, it is a reſt and quietneſſe of the body, and chiefly of the ſpirits and faculty animall, for-tifying the ſtrength, helping the concoction, correcting the perturbations of the mind, and humecting the internal parts of the body.

Pe. What is the cauſe of ſleeping?

Hippo. lib. 1. de inſomniis.

Jo. The cheife cauſe is in the brains, when the vapours aſcend thereunto, and by the coldneſſe of the brains, thoſe vapours are turned unto humors, the which cloſeth the conduits of the Nerves.

Pe. What things doe provoke ſleep?

Jo. All ſuch things as make aboundance of vapours, like as wine, Ale full of barm, milk, and all things that are moiſt and cold, and commonly after meat vapours aſcend firſt to the head, and ſo provoke ſleep: for this cauſe ſome

use a little oyle of Roses, and Camphier, mixed with womans milk, and apply it to the temples of the head.

Pe. Doe all men sleep alike in quantity?

Jo. That is according to the temperature of the person, for some sleep longer and some shorter.

Pe. What time is ordinarily ordained for man to sleep?

Jo. Seven or eight hours, some nine, as sayth *Galen.* *Plinie* saith, that in sleeping we spend the half of our time, it dulleth the head, it hindreth to digest the crudities, it gathereth abundance of excrements, it thickeneth and maketh grosse the spirits of old folks and children, it retaineth the excrements; in sleeping cover well thy head and feet, for cold of the extremities is very contrary unto those that have their braines cold and humide. *Lib. de tuend. valetud cap. 5. Plinie.*

Plinie in the 7. of his naturall History sayd, that *Epimenides* did sleep in a cave the space of 57. years, being wearyed, and by the heat of the Sunn; yet when he wakened, he thought he did sleep but one day. *Plinie.*

Pe. What time is most meet to sleep in?

Jo. Hippocrates, Ætius, and others, are of this opinon, to walk in the day, and sleep in the night, for that is the institution of nature: Also that sleep should begin two hours after super, such time is most meet for the digestion of our meats, for by sleep the naturall heat is in the center of the body. Sleeping in the day filleth the brains full of humiditie, also it hindereth the concoction, of the which commeth ganting, rifting, winds, heavinesse of the members, chiefly of the head, and divers sicknesses, as catarhes. Cardane counsaileth to sleep in the day, but meaneth of such folks as doe not rest in the night. Not good to sleep in the day *Lib. de contradicent medico.*

Pe. When men goe to sleep, which side should they lye upon?

Jo. First on the right side, because thereby the meat goeth more easily to the bottom of the stomack; thereafter on the other side; in no wise on the face, for that causeth defluxions in the eyes, as sayth Jesus; nor on the back, for that heats *Lib. de oculis.*

the great vain Cave, and ſendeth vapours to the head, maketh hot the reins, the apoplexie, maire, gravell, and divers other accidents: in no wiſe the hands under the head, as ſome doe, for that cauſeth deflurion of humors on the lights: ſleep not ſoon after meat.

Pe. What is to be obſerved in ſleeping, of ſick folks?

Jo. Hippocrates ſaith, thoſe ſicknesſes wherein ſleeping is painfull, eſteem them to be dangerous and mortall, if not painfull, it is a good token.

Libro de somniis.

Pe. It is needfull to obſerve Dreams in ſleeping?

Jo. Cardane ſaith, dreams are not to be neglected, becauſe ſometime by that wee know the affections of the humors, which dimaneth: as for example, the ſanguine dreams are merrie, the cholerick dreams are fiery, the melancholique ſad, the flegmatique cold.

Pe. What meaneſt thou by waking?

Jo. Waking ſhould be moderately uſed, for much waking corrupteth the brains, and the good temperature, it debilitateth the ſences, altereth the ſpirits, moveth crudities, alterations, heavineſſe of the head, reſolution of all the body, diſſipateth the naturall heat, *Hippocrates* ſaith, that ſleeping and waking if they be exceſſive, they are evill and perilous: ſo mediocrity is beſt in all things: the cauſe of waking is dryneſſe and heat of the brains, it dryeth the habitude of the body: Thus much concerning ſleeping and waking.

Hippocrates.

The cauſe of waking, is the dryneſs of the brains.

Chapter V.

¶ Of Repletion and Evacuation.

Pe. THou ſhalt underſtand that Repletion, Plenitude, and Aboundance, is all one matter; Therefore I would know, how many kinds of repletion there are?

Jo. There

Jo. There are two, to wit, in quantitie and qualitie?

Pe. What meane you by repletion in qualitie?

Jo. I meane, when the qualitie of meate exceedeth without the humors.

Pe. What meane you by quantitie?

Jo. I meane, when meat, drinke and humors, are in so great quantitie that nature cannot overcome, and it is called excesse or facietie, of the which commeth most infinite maladies.

Pe. How many kindes are thereof?

Jo. Two, the one of meat, called *facietas* of the Latines, the other of humors.

Pe. Is facietie of meate otherwise divided?

Jo. It is yet divided in two, the one is called *Saietas ad vasa*, that is, when the stomack and veines are so full that it maketh them over-large, as happeneth to them that are alwaies eating and drinking in such quantitie that they are constrained to vomit it up again: for that not only offendeth God, but weakneth their own bodies. Two sorts of excesse of meat.

The other sort of plenitude is called *facietas ad vires*, which is, when there is so great abundance that the virtue, force, or facultie of our bodies cannot digest.

Pe. Tell mee what the qualitie of repletion of humors is?

Jo. It is, when all the humors, or one alone, exceedeth and dimaneth, such as are good and lotwable.

Pe. How calleſt thou it, when all, or one onely dimaneth?

Jo. When all, it is called Plethora by the Greekes, and Plenitudo by the Latines; when one dimaneth, as the vitious humors, it is called Cacochymia, or juice vitious, either of the choller, flegme or melancholique.

Pe. What is evacuation or inanition? What evacuation is.

Jo. It is an out-drawing and taking away of the humors which dimanes and moleſteth our bodies, which are evacuated either universally or particularly.

Pe. Which are the universall evacuations?

Io. Those which are done by purgation, vrining, bleeding, vomiting, scarrification, exercise, friction, bathing, medicaments, digerents, hegerents, menstruous, purgations: also by the act venerian, in like manner by abstinency of meat, but that is done by accident.

Pe. Tell mee by what manner the evacuation universall is done?

Io. By purgations, and by medicaments catarticks accommodated to every kind of humor, by things diureticks, vomitors, things which provoketh spitting: and divers others, which I leave to the learned Phisitian: Phlebotomie, how it is used, when, and after what fashion, ye shall hear at length in the first Book: like as of frictions the body is evacuated by the immoderate act of *Venus*, like as divers other mischiefes ensueth thereupon. And first of all, it is hurtfull for the eyes, and all the organs sensitives: the nerves, the thorax, the neires, and divers other parts of the body maketh men forgetfull, provoketh the gout, dolours, nephretickes, and divers diseases of the bladder, bringeth soon old age, consequently death.

The mischiefs of *Venus*.

note

Galen saith, that those beasts who often joyne together, are of shorter life than those who joyne seldomer: it doth hurt being immoderately used, not only to the man, but to all animals. *Plinie* telleth of two that dyed sodainly in the act venerian: women are alwayes better disposed saith *Hippocrates*.

Plinie.

Notwithstanding, the Bishop of Illerden in Spain, in his Book intituled *Consilium fraternitatis*, reporteth that a woman in his time did complain to the King of Arragon, that her husband did know her thirtie times a day, and her husband confessing the same, was commanded upon paine of death not to know her above six times a day; least the woman should be in danger of her life. Wherefore, saith he we are not so much to marvaile at the ability of the husband, as at the complaint of his wife, for the Verse sayth.

It

Et laſſata viris nondum ſatiata recessit.

And alſo in the 30. Chapter of Salomons Proverbs: three things are inſatiable, and the fourth was never ſatisfied. But, becauſe ſuch as delight in this paſtime, will formalize; as alſo, becauſe the uſage hereof is ſometime profitable to the Chyrurgion I will not altogether condemn it: but like as I have ſet down the diſcommodities, ſo ſhall ye hear the commodities hereof, according as ſome learned men have written. *Prov. 30. 2.* *Lib 1. cap. 17.*

Paulus Ægineta ſayth, the uſage of *Venus* moderately uſed, maketh the body more agill and quick, it ſoftneth the inſtruments being hard, it openeth the conduits, it purgeth the flegme, and is profitable for all phlegmatick paſſions, and heavineſſe of the head, driveth away anger, ſadneſſe, melancholick imaginations, nocturnals, and procureth appetite. *Haliabilis li 5.* *Philippus Gravilonius.*

Ætius calleth it a work of nature, and being moderately uſed, doth good. It evacuateth the ſperme, which otherwiſe might become to ſome venomous qualities; and ſo deliver eth man of many evils, as *Galen* ſaith. *Lib 3. cap. 8.*

Hippocrates reporteth, that the firſt act of *Venus* reaſeth many great ſickneſſes: abſtinency doth alſo evacuate the body both in the ſick and in the whole. The which is divided in two wayes: The firſt, when yee neither eat nor drink at all, and that is called abſtinence. The ſecond, when wee take meat, but not ſo much as is needfull for the conſervation of the virtue, and that is properly called diet. *Henricus Ranzovius. Gal. 6. de locis affectis.*

Pe. Which are the particular evacuations?

Jo. When the brains diſcharge by the roſe of the mouth, and noſe, evidently, by the eyes and eares obſcurely: the lights by the trach arteries by ſpitting, the ſtomack by vomiting; the inteſtines by the excrements at the fundament; the liver, ſplene: kidnies, and bladder, by urine the privy

priuy parts of women by naturall purgation, or monethly courſes: as ye ſhall heare in my bookes of Womens diſeaſes.

Chapter VI.

¶ Of the Paſsions and Perturbations of the Minde.

Pe. *Ariſt.* doth diuide the mind into two parts, to wit, that of reaſon, and the other without reaſon. It is ſubiect to diuers paſſions, therefore ſhew me what thou calleſt the paſſion of the minde?

Agrippa. lib 1. de occult. Philoſo.

Jo. It is a ſuffering of the minde by the iuſt courſe, the which maketh marueilous mutations in the body, and therfore moſt neceſſary to be remarked, becauſe of the great chances which enſue thereupon, as wee may perceiue by *Ariſt.* who ſayth, that the motions and perturbations of the minde, bringeth great mutations into the naturall heate.

Hippo. 6. epid. Gal. 2. de ſym. cau. cap. 5. & method 2.

In like manner, *Hippocrates* and *Galen* doe ſhew, that many dye by the motions and perturbations of the minde: for they either dilate or compreſſe the heart, for the which the vitall ſpirits are rather caſt forth by the great dilation of the heart, or elſe retained by the great compreſſion thereof; amongſt the which, ioy, hope and loue, caſteth the ſpirits outwardly, ſadneſs and fear recalleth them inwardly to the center of the body in diuers manners.

Henricus Renerius de conſer. valetud.

Pe. How many ſuch paſſions are there?

Jo. There be diuers: But here I will tell of ſuch which are moſt common, like as mirth, ſadnes, fear, anger, ſhamefaſtnes, enuie, hatred, hope and loue.

Pe. What

Pe. What is mirth?

Io. It is an affection of the minde, of a thing good and pleaſant, by the which the blood and ſpirits are pleaſantly ſpread for the preſent goodneſſe, by the dilation of the heart: but if it be great & laſt any long ſpace, oftentimes death enſueth, becauſe the heart is altogether deſtitute of blood. *Ariſt.* reporteth of a woman named Policrita, that dyed for joy. I read that one Philippides a writer of Comedies, being contending with another, and overcame him beyond his expectation, did die for joy. *Policrita.* *Philippides.*

Valerius Maximus writeth of two women, one Chilon a Lacedemonian, and Diagore a Rhodian, that did die for joy, for the happy returning of their ſonns from the warre, as alſo becauſe they had overcome their enemies. *Valerius lib. 9. cap. 12.* *Chilon.* *Diagore.*

Gellius reporteth of one Diagoras, when hee did ſee his three ſonns crowned at Olympus for their virtue, died for joy imbracing them in preſence of the whole people. Theſe accidents happen oftener to women, than to men, becauſe they have the heart more cold, & the fewer vitall ſpirits, & ſo both ſooner diſſipate, & ſo die. In like manner, men who bee faint-hearted and feeble ſpirited, yet joy moderatly uſed, worketh many good things in us. It reſuffocateth the ſpirit, helpeth the concoction, and all the habitude of the body, fortifieth the virtue animall; but much laughing is hurtfull, chiefly to yong children.

Pe. What is ſadneſſe?

Io. It is an affection that doth reboke the naturall heat inwardly, to the center of the body, but at great leiſure it preſſeth the heart, dryeth up the body, that hardly the ſpirit vital can governe as before, and is ſo weakened, that it may not go with the blood through the reſt of the body, ſo waſteth the body in ſuch ſort, that it becometh atrofied and lean, whereupon death often enſueth. *Henricus Renovius de cur. ſer. valetud.*

Cicero ſayth, it were a great good amongſt men to live on eating and drinking, but it were a greater good if men could live without ſadneſſe and melancholly, becauſe the meat

we eat doth make corruption of humors in our body, but ſadneſſe and melancholy doth conſume the fleſh, bones, and gnaweth the entrails, of the which divers dye. Salomon ſaith a ſad ſpirit dryeth up the bones, and a merry heart reioyceth the minde.

Plinius reporteth, that one *Petrus Rutilius*, after he had heard that his father had a repulſe of his petitions, died with ſadneſſe. *Marcus Lepidus*, after his wife was divorced from him, did likewiſe dye; with Ely the high Prieſt of the Iews, and divers others.

Pe. What is fear?

Cornelius Agrip. de occult. Philoſ. lib 1. cap. 63.

Io It is a motion which revoketh the ſpirit to the center, to the heart by the arteries, which ſuffocateth the vitall and naturall heat, cauſing trembling, whereof ſometime the belly loſeth, and ſometimes death enſueth.

So I finde that fear maketh the like accidents which melancholy doth, but greater, and in shorter time it drawеth the blood and ſpirits to the heart, the viſage becommeth pale, the extremities cold, with univerſall trembling, intercepting the voyce with palpitation of the heart, being ſuffocated by the great aboundance of blood and ſpirits, that it cannot move freely.

Xenophon.

Galen ſaith, that this paſſion happeneth oftner to women, and thoſe of cold temperature, than to others. Zenophon ſaith, that the great torments of fear are more vehement than all preſent adverſities. Divers learned men doe affirm that men have grown white in 25 years, only by the apprehenſion and fear of death.

Antonius de abditis morb. cauſis.

Antonius Benevenius writeth of a boy that dyed for feare, by ſeeing two men clad in black, going to the ſtool; the which boy dyed eight dayes after about the ſame hour, like as doth the moſt part.

Pe. What is Anger?

Io. It is a ſuddain revocation or calling back of the ſpirits to the externall parts, with an appetite of revenge: or it is an ardent heat or ebullution of blood in the heart, with deſire

fire of revenge: it enflameth the whole habitude of the body, causeth fevers by reason of the inflamation of the heart, the spirits and blood are troubled, as also the brains and nerves of the which commeth frenzies, and other evill accidents, it bindeth the heart and lights.

Pe. What is shamefastnesse?

Jo. It is a motion of our body mixed with anger, by the which one knowing and suspecting his own fault, would be angrie with himselfe, seeing the judgement of others. In this passion the blood returneth in, and suddainly doth come out, the cheeks and face becometh red, of this passion some dye. Plinie telleth that one Diodorus professor of Dialectick, who having a question propounded unto him, and not answering as he should, dyed for shame. Valerius Maximus reporteth, that Homer dyed for shame, because he could not answer a question propounded to him by certain fishers.

Hali Abbat. Lib. 5.

Plinius. Diodorus.

Valerius. Maximus.

Pe. What is envie?

Jo. It is a heady oppression of the heart, angrie at the felicity of some other man.

Pe. What is hatred?

Jo. It is an old malicious habitude bred of anger, by the which the heart would reveng the injurie.

Pe. What is hope?

Jo. It is a motion, by the which the heart desireth the future good: it openeth and dilateth the heart, like as joy for the present good.

Pe. What is love?

Jo. It is a fervent motion, by the which the heart desireth ardently, and endeavoureth to draw unto it, a good, assured, and apparant, not much different from hope, except the love be more ardent.

THE

The third Book;

Of things altogether contrary to our Nature.

Which containeth three Chapters. By PETER LOVVE *Scottiſhman.*

CHAP. 1. Of Maladie.
2. Of the cauſe of Maladie.
3. Of Accidents and Symptomes.

Pe. I Have diſcourſed with you of Naturall things, whereof our body is compoſed; as alſo of Unnaturall things, which may alter our body being duly uſed: So, now I intend to ſpeak unto you of things which are altogether contrary to our nature, and deſtroyeth it. For the which cauſe *Galen* calleth them things contrary to nature. Therefore let mee know what things bee thoſe which bee altogether contrary to our nature, with their number?

Galat. 2. de Cæter. & 1. de ſymp. cam. cauſ.

Jo. They bee three; to wit, Maladie, cauſe of Maladie, and accidents of Malady.

CHAPTER

Chapter I.

¶ Of Maladie.

Pu. Seeing thou callest the first of the three things contrary to Nature Maladie, then tell me what is the definition thereof?

Jo. It is a disposition against nature, which hurteth manifestly the operations of the body. Definition.

Pu. What is health?

Jo. It is a constitution according to nature, which maketh the actions of our body perfect.

Pu. How many kinds of Maladies are there?

Jo. Three; to wit, Intemperie, evill confirmation, and solution of continuitie. Three kinds of Maladies.

Pu. What is Intemperie?

Jo. It is a maladie in the similar parts, digressing from the owne temperature.

Pu. By how many wayes was it divided?

Jo. Two wayes, to wit, either by the simple intempery, or by the abundance of the humor only, as by cold, hot, moyst, and dry.

Pu. What is evill confirmation?

Jo. It is a vice in the parts organicks, either in figure, magnitude, or scituation: as for example, that which should be naturally right, is oblique, and so forth: as if a part were augmented or diminished contrary to nature: also in the number of the parts, as if a man had five fingers, or six: also in the scituation or collection, as if parts naturally joyned were disjoyned, as happeneth in dislocations. What evill confirmation is.

Pu. What is the third kind of Maladie?

Jo. Solution of continuitie both in the similar and organick parts, which have divers names, according to the varietie of the parts where they are.

CHAPTER

Chapter II.

¶ Of the cauſe of Maladie.

The cauſe of Maladie.

Pe. VVHat is Maladie?

Jo. It is ſome affection which maketh ſickneſſe, of the which ſome are externall ſome internall.

Pe. Which are the externall?

Jo. They bée called procatarticks, or primitives, as ſtrokes, falles, wounds, ſhot, and ſuch like: as alſo evill nouriture.

Pe. Which are the internals?

Jo. They be two, Antecedents and Conjuncts.

Pe. Which are the Antecedents?

Jo. Evill humors in the body.

Pe. What are the Conjuncts?

Jo. It is that which maketh the ſickneſſe preſently, and is alwayes accompanyed with the ſickneſſe.

Pe. How commeth the cauſe of Maladie?

Jo. There are ſome who have it from their mothers womb, and from their parents, which wee call hereditarie ſickneſſe: ſome doe ingender after our birth, as by the evill regiment of life, ſtroks, and falls, as yee have heard.

Chapter III.

¶ Of Accidents and Symptomes.

Lib. de ſymptom. differen.

Pe. VVHat call you Accident or Symptome?

Jo. Galen ſayth, that ſymtome is any thing that chanceth to man by nature: ſo the cauſes internes of ſickneſſes, may be called ſymptomes.

Pe. How many kindes of Symptomes are there?

Jo. Thre

Three kinds of Symptomes

7o. Three; the first, is when the action is offended, which may be divided three wayes: that is, either by abolition, diminution, or deprivation. As for example; in blindnesse the sight is abolished. Diminished, as suffusion, which happeneth in the beginning of the Cataract of the eye. Depriveth, as for a certain time, like as in changing the simple affections of our body, or the whole habitude from one extream to another: as the naturall heat to the inflamation, the scabb of the flesh to leprosie. The third is, in the vice of the excrements by immoderate retention or expulsion, as the Hemorods, the purgations or monethly courses of women, and urines. These or either of these being reteined or evacuated over-much, maketh many great and evill accidents in the body.

Of Tumors, or Apoſthumes againſt Nature.

The Contents whereof containeth XVI. *Chapters.*
By Peter Lowe *Scottiſhman.*

Chap. 1 Of Tumors in generall.
2 Of Phlegme.
3 Of Epinictis, Terminthus, and Theribinthus.
4 Of Furuncle or Dothin, which proceedeth of Phlegme.
5 Of Anthrax, or Carbuncle.
6 Of Gangrena, and Hiſtiomen.
7 Of Spaſhell.
8 Of the extirpation of Fingers or Toes.
9 Of the Tumor called Heriſipilis.
10 Of Herpes.
11 Of Ædema.
12 Of the windy Tumor which proceedeth of Ædema.
13 Of the watry Tumor which proceedeth of Ædema.
14 Of Atheorema, Steotema, Melleriſeris.
15 Of the melancholick Tumor, called Schirr.
16 Of Cancer, or Carſinoma.

Chapter I.

¶ *Of the Cauſes, Signes, and Curation of Apoſthumes in generall.*

Pe. NOw it ſhall be neceſſary that I inſtruct thee in the exerciſe of Chyrurgerie: For the better underſtanding of the ſame, I will begin at Tumors againſt Nature, in demanding firſt of thee, what is a Tumor or an Apoſthume?

The definition of apoſthumes

Jo. It is a diſeaſe compoſed of three divers maladies;

maladies to wit, evill complexion in the ſimilar parts, evill compoſition or conſtitution in the inſtrumentall parts, and ſolution of continuitie in both ſimilar & inſtrumental parts, offending the action of the member where it is. *Gal. 2. ad glau cap. 7.*

Pe. What are the cauſes of Apoſthume?

Fo. Some are generals, and ſome are ſpecials.

Pe. Which are the generall cauſes?

Fo. Either fluxion, or congeſtion.

Pe. What is fluxion?

Fo. It is a motion of the humor of the body, to ſome certain part, the which either by quantitie or qualitie, or both together, may not be received by the part without offence. *Gal lib. 13. meth cap. 5. & 6.*

Pe. Which are the cauſes of fluxion?

Fo. They are double; to wit, either in part or parts that ſend, or in the part or parts that receive.

Pe. How is the fluxion made in the parts that ſend?

Fo. When the faculty retentrix of the part is overcharged with humors, which doe either offend in quantitie, qualitie, or both: for then the part diſchargeth it ſelf by the virtue expultrix, cheifly being ſtrong: as likewiſe when the part that ſendeth, hath connexion with the part that receiveth, or the part that receiveth being inferior to the part that ſendeth: alſo if the ſaid parts have any ſimpathy together, as the ſtomack with the brain. *Alexander. Aphroditus problem 72. lib. 2.*

Pe. Which are the cauſes in the parts that receive?

Fo. They be divers, like as weakneſs, not having force to expell or put themſelves elſe where: alſo when the veſſels and conduits are large where the matter doth paſſe, or becauſe it is ſoft in ſubſtance, ſo more eaſie to receive, ſometime for the colour which maketh attraction of the matter from the parts nèer unto it, as likewiſe great heat which draweth and provoketh fluxion.

Pe. What is Congeſtion?

Fo. It is a maſſe of matter contrary to nature, ingendred of the ſuperfluities of the third concoction of that aliment & food, which are diſtributed for the nouriture of the parts of

the body, which chanceth when the aliament is not so digested, that it may well be appropriated to that part which should be nourished.

P. Which are the causes of Congestion?

Jo. They are eyther imbecility of the faculty concoctrix of the part which cannot digest that which is sent to it by nature, for the nouriture thereof, or imbecility of the faculty expultrix, which cannot expell the superfluities that resteth commonly in the part.

Comment in aphoris. 2 sect. 1 lib 4.

P. By what means know you the Tumors made by fluxion, and that by congestion?

Jo. The tumors which be made by fluxion, are with great dolour, redness, pulsation, and maketh the degrees faster then those which are done by congestion: those which are done by congestion doe grow little and little, and in like manner doe diminish when they come to their declination.

Haly Abbas lib 8

P. Which are the speciall causes of Apostemes?

Jo. They are three, primitive, antecedent and conjuncta.

P. Which are the primitive causes?

Tangel. in lib. tumor præter naturam.

Jo. They are externall, like as falls, strokes, and other externall violences which may move the humors of our body: also great heat of the ayre, as likewise meat or drink taken over cold.

P. Which are the causes Antecedent?

Jo. They be internall, not knowing as the precedente, the which doth ingender not only the maladie, but also entertained such as the humors naturals, offending eyther in quantitie or quality: also the intemperature, weakness, evill confirmation, and dolour of the parts.

P. Which are the conjunct causes?

Jo. The conjuncta is the matter gathered together in the place, and so is called, because it is with the sickness, and nourisheth it with the disposition of the member.

P. Which are the generall signes of Apostemes?

Gal. cap 6 lib. 10 met. & cap. 7 lib. 2. meth.

Jo. Tumor or swelling in any part by the naturall disposition, offending the action: also differing of the parts which

should

ſhould be like to other : alſo colour and heat.

Pe. By what ſignes know you every kind of Tumor?

Jo. Either by the colour, intemperature, hot, cold, hardneſs, ſoftneſs, dolour, tention, gnawing : as alſo by the continuation of the fluxion : for firſt the colour is like unto the humor ; as if it be red, it proceedeth of the ſanguine humor, if white of pituita, if black of melancholique, if yellow of choller : Furthermore, if there be heat, it ſignifieth either ſanguine, choller, or burnt humor, if cold, watry, or windie, it ſignifieth the humor pituitus or melancholique, to be in the part : alſo hardneſſe with dolour ſignifieth phlegme, if without dolour, ſchirus : if ſoftneſs without dolour, it ſignifieth Edema : great tention betokneth repletion of wound : if mordication or gnawing, it ſignifieth the acrimony of the humor, which maketh the tumor. *Gal 14 meth. cap. 9 & 6 de morb. cau. & comm. in aph. 32.*

Pe. How many ſorts of Apoſthumes are there?

Jo. Two, hot and cold.

Pe. Which are the hot?

Jo. Thoſe which proceed of blood and choller.

Pe. Which are the cold?

Jo. Thoſe which come of phlegme or melancholy.

Pe. Which are thoſe that proceed of blood?

Jo. They be divers ; like as Phlegmon, Carbunculus, Fimous, Figetlon, Terminthus, Terebinthus, Cachimetha, Cangrena, Anthrax, Tuberculus, Ophthalmia, Scinantia, Bubo.

Pe. Which are thoſe that come of choller?

Jo. Erefipilas, Herpes, Formica, Empetugo.

Pe. Which are thoſe that proceed of *pituita?*

Jo. Edema, with all watry and windie Apoſthumes, Atheroma, Steotema, Melleleris, Aſtois, Leuchophlegmatia, Bruncocele, &c. *Gal. lib. tumor. contra natur. cap. 5 & 13. meth.*

Pe. Which are thoſe that come of melancholy?

Jo. Leproſie, Schirrous, Cancer, Gracunculus, Warts, Clades, Fimous, Morphea, *alpha & nigra* : Of all which we ſhall hereafter intreat particularly in ſeverall Chapters.

Here it ſhall ſuffice to know that they doe proceed of the four humors.

Pe. What judgement give you of Tumors?

Jo. Some be curable, ſome dangerous, others dolorous, ſome long in healing, and ſome be mortall.

Pe. Which are curable?

Gal ad Glau. cap. 4 & lib. 1. & 4 meth. *Jo.* Thoſe which are in the parts muſculous, and bodies of good temperature.

Pe. Which are dangerous?

Jo. All thoſe which doe penetrate internally in the body, and thoſe which are very large, not pointed, as ſaith Hippocrates, and thoſe which are in parts very ſenſible.

Pe. Which are the dolorous?

Jo. Thoſe which are in the parts nervous and membranous, and are ingendered of a ſharp and biting humor.

Pe. Which are long in healing?

Jo. Galen ſaith, that thoſe which happen in rich and delicate perſons, becauſe they refuſed fit remedies for the curation of ſuch tumors, alſo all thoſe that are hard, and in evill diſpoſed bodies and hydropicks, elephanticks, all ſuch are long in healing.

Pe. Which are mortall?

Jo. Thoſe which are venomous, or taking the courſe inwardly towards the noble parts, or thoſe which are in the noble parts.

Pe. How many times or degrees have the Apoſthumes?

Gal lib. de tot. morb. cap. 3 & cap. 1. de morb. temperi. *Jo.* Four, to wit, the beginning, augmenting, ſtate or vigour, and declination.

Pe. What is the beginning?

Jo. It is when the humor doth firſt appear and beginneth to ſwell.

Pe. What is augmentation?

Aetius Lib 4 Gal. li. 4 cap. 4 meth. & 6 epi mer. *Jo.* It is when the tumor groweth more and more, as alſo the accidents.

Pe. What is ſtate or vigor?

Jo. It is when neither the tumor nor accidents grow, but remain

remain in one eſtate.

PE. What is the declination?

JO. It is when we perceive the tumor and alſo the accidents, to diminiſh with a diſſipation of the humor, either by reſolution or ſuppuration. *Actius lib. 4. cap 31.*

PE What is reſolution?

JO. It is the evacuation of the humor, by the pores of the fleſh, inſenſible to us.

PE. What is ſuppuration?

JO It is a virtue which maketh the humor gathered in the place into matter: ſo all Apoſthumes doe either end by one of thoſe determinations, or elſe by induration or corruption: ſo in all, there are but four terminations, the beſt is reſolution in the beginning, the worſt corruption, but ſuppuration is better than induration.

PE. Which are the ſignes of thoſe terminations?

JO. The ſignes of reſolution are lightneſſe or eaſe, of the member tumified, diminution of dolour, pulſation, and tenſion, with itching in the part. The ſignes of ruppucation, are dolour, pulſation, augmentation of heat and feaver, with eminent tumor. The ſignes of induration are diminution of tumor and the accidents precedent, with a manifeſt hardneſſe. The ſignes of corruption are diminution of feeling of the dolour, with change of the colour and ſo becommeth by little and little black, and evill ſavoured.

PE. What is the generall cure of Apoſthumes?

JO. As for the cure we muſt underſtand, that either the tumor or ſwelling is in making or is alreadie made, for the which cauſe we have two intentions, the one to ſtay the fluxion of the humor to the place, the other to evacuate the humor gathered in the place.

PE. How ſtayeſt thou the fluxion?

JO. Firſt I conſider, if it come of plenitude of all the body, and then I ſtay it by letting blood: if the region, ayre, time of the year, and ſtrength of the patient do permit, after the form you ſhall hear in the ninth Book: alſo by bathing, *Gal. ad glauc. cap. 2. & lib. 3: meth. ca. 4. & c.*

exercise, unctions, degerents, and abstinence, In like manner, if cacochimie or plenitude of humors, I heal it by vomiting, purgations, and glisters. If through imbecillitie of the part, I fortifie it by fit remedies. If by the scituation which is lower, I scituate the parts in such fashion, that the part which offendeth is higher than the whole. If dolour be the cause, I stay it by using anodine remedies, as yee shall hear in the tenth Book. If great heat, I stay it by cold things, and returneth the flurion by scarrifications, ventosing, corners, Horsleaches, straight binding, frictions, and such like.

Gal. lib 5. fin. com ca. 6.

Pe. By how many wayes doe you fortifie the part?

Jo. By three wayes, that is, by cold and humid things, or cold and drie, or cold and striptick, so any part may be delibated three wayes, that which relared with heat and humiditie, must be comforted with cold and drie things: the hot and drie is healed by cold and humid things: if hot and open of the pores, it is cured by things cold and striptick.

Pe. Which is the second intention?

Jo. It doth consist in evacuating that humor, which is made, to the end the member may return into his own estate.

Pe. How is evacuation used?

Gal lib 14. meth ca. 4 5

Jo. Two wayes, first by drawing the humor to some other part, as to repell it inwardly: also in fortifying of the member.

Pe. When shall repercussives bee used?

Gal. lib 1. prognost. com. Apb. 35.

Jo. In the beginning, and that as well on the sore as about it, but that which is on the sore must not be so astringent, nor corroborate as that which is about.

Pe. How many kinds of repercussives are there?

Repercussives.

Jo. There are divers, for some bee cold without astrition, like as Bolarminie, Plantine, the Stone Hematite: some bee hot, as galls, red wine, nuts of Cypres, worme-wood, mastick, and such like.

Pe. Are they not otherwise divided?

Guydo in his Introitorie.

Jo. Guydo at Coleac doth divide them into propers, and commune:

commune: the proper as Dricrate, Solanum, Solarmenie, Wormwood, and ſuch like: the communes are theſe, whites of Egges, Hallowes, oyle of Roſes, Cammomile, Paſtricke, and ſuch like.

Pe. How ſhall theſe divers ſorts bee uſed?

Jo. When the matter is hot the repercuſſives ſhall bee cold, and when it is cold, they ſhall be hot.

Pe. Are repercuſſives indifferently uſed in all ſicknesſes? *Gal. lib. 14. meth. cap. 3.*

Jo. There are ten exceptions wherein the propers are not uſed. Firſt, when the matter is in the emunctoires of the noble parts. Secondly, if the matter be venomous. Thirdly, being thick and evill to remove. Fourthly, when it is very hard impacted in the place. Fiftly, when it happeneth in the criſis of a ſickneſs. Sixtly, when the matter commeth of a cauſe primitive. Seventhly, in a bodie plethoricke. Eightly, when the part is weak, and the body deſtitute of force. Ninthly, when it is in the noble parts. Tenthly, when it is with vehement dolour, and in that we uſe anodines, and not repercuſſives. Ten exceptions of uſing repercuſſives.

Pe. How is the ſecond intention done?

Jo. By evacuating that is done in the place, and that by reſolving and diſcutient medicaments and evaporatives, that are meanly hot and humid. In like manner, by drawing emplaſters, by ſucking, ventoſing of the part grieved, as ſaith Avicen. *Avicen.*

But yet in both the evacuations, wee muſt regard the quantitie and qualitie of the matter which the tumor is compoſed of: As alſo to the nature of the place where it is, for wee muſt not cure thoſe which proceed of blood, as thoſe which come of phlegme, choller, or melancholy.

Alſo wee muſt reſpect the nature of the parts: for wee muſt uſe other remedies in ſoft and humid parts, as the fleſh and glands, than in hard and dry parts, as nerves, ligaments, cartilages, and bones. *Gal. ad glauc. cap. 2.*

Wee muſt alſo have reſpect to the parts of the body, for ſome

ſome are ſimples, others compoſed, ſome of one temperature, ſome of another, ſo the remedies, which muſt be uſed, to the part. Wee muſt alſo reſpect the conſirmation of the part, for ſome are hollow without or within, ſome are ſoft, eaſie to receive reflurion.

Gal. 2 ad glau. Gal. 7 meth. cap. 13.

In like manner, we muſt regard the communications of the veines one with another, alſo the commoditie of the conduites, to expell the excrements: as alſo to the virtue of the place, for ſome are ſenſible, ſome not: as alſo to the diverſitie of the parts for ſome are noble parts, as the brain, the heart, and the liver, which ſend the virtue through all the body by the nerves, arteries, and vaines: others doe ſerve the principall parts, without whoſe action wee cannot live, like as the ſtomack, kidnies, bladder, and ſundry others.

Gal. artis par. cap 9.

Gal. lib. 2 ad Glau cap 2.

In parts that are ſenſible, wee muſt beware to apply medicines that loſe and reſolve immoderately, or to apply any thing that is of a ſtrange qualitie, and venomous.

Pe. Are there no other things to bee obſerved in the cure of tumors?

Jo. Wee take our indication according to the diverſitie of the tumor.

Pe. How many ſorts of tumors are there?

Four ſorts of tumors.

Jo. Four, ſome are hard, others ſoft: ſome inward, and ſome ulcered.

Pe. What remedies uſe you in thoſe Apoſthumes?

Jo. In hard apoſthumes, we uſe remedies that ſoften and have a hot and ſomewhat drie virtue, wee uſe no reſolvatives in ſuch tumors, by reaſon the matter wareth hard like a ſtone: the ſoft are cured by hot things, that reſolve and open the pores: the ulcered apoſthumes, like as Formica, are healed by cold things: the inward are cured by diminiſhing the matter, with bleeding, purging, and other generall remedies, abſtaining from all ſtrong drink, violent exerciſe, and perturbations of the minde, like as anger, fear, and the reſt, which ye have heard in the Book of Unnaturall things.

The

The reſt of the cures pertaineth to the judgement of the expert Chyrurgion, ever uſing ſuch remedies that hath the virtue to ſoften and make ripe, like as Caſſia Fiſtula, Triacle, and ſuch others, which have the virtue to reſolve hidden Apoſthumes. *Marianus Sãctis de modo exam. Chyr. Antonius Benevenius de abdit. morb. cau.*

Pe. If the Apoſthumes neither end by reſolution, induration, nor corruption, but by ſuppuration, what ſhall bee done?

Jo. They muſt be opened.

Pe. How many wayes muſt they bee opened?

Jo. Two wayes, either by themſelves, or by help of the Chyrurgion.

Pe. Which are thoſe that bee opened by themſelves?

Pe. Thoſe which are hot, eminent, ſoft, and tender skinned.

Pe. In what time doe they open moſt commonly?

Jo. Some in tenn, fiftéen, or twentie dayes doe open, others in fortie or threeſcore dayes: and this happeneth according to the temperature, or by the application of fit remedies. *Hip. 2 progno.*

Pe. Which bee thoſe that bee opened by the help of the Chyrurgion?

Jo. Thoſe which are hard, cold, large, in bodies evill diſpoſed, and thick skinned: in cold membraineus parts, and in the emunctoryes.

Pe. How many wayes doth the Chyrurgion help?

Jo. Three wayes, either by Cauter actuall, potentiall, or inciſion.

Pe. How many wayes maketh the Chyrurgion his inciſion?

Jo. Three wayes; ſome inciſions are made in length, breadth, and circular, according to the part. Three wayes of inciſion.

Pe. What mean you by length?

Jo. When it is according to the rectitude of the muſcles, nerves, and membraines, to the end the action of the part may be preſerved.

Pe. When

Pe. When make you your inciſion by bread?

When inciſion by bread is to be made. *Cornelius Celſus lib. 7. cap. 2.*

Jo. When we have intention to deſtroy the action of the part, as in ſpaſme or convulſion wee cut the nerve or muſcle overthwart, to ſave the reſt of the body, for better it is to debilitate one member than loſe the whole.

Pe. When uſe you inciſion circular?

Jo. When the cavitie is great, to the end the humor or matter may evacuate the better. And here I doe remark that ſomtime in opening thoſe Apoſthumes, there is errour committed, in thoſe which penetrates under the womb, for they appear to the ſimpler ſort to be Apoſthumes, and are only called ruptors, whereof good hæd would be taken.

Gal. 13 meth cap. 1.

Pe. I have enformed you ſufficiently touching Apoſthumes in generall, I will hereafter particularly intreat of every one of them by themſelves, beginning at thoſe which proceed of blood, and firſt with Phlegmon, becauſe it is moſt common, and cauſeth divers accidents. Then I will follow out the reſt in order, as well generally as particularly, which being done, I will entreat of wounds after the ſame method.

Chapter II.

¶ Of Phlegmon.

Definition.

Phlegmon, is a tumor or Apoſthume againſt nature, ingendered of defluxion of blood, which happeneth in divers parts of the body, but moſt commonly in the ſoft parts, and

Gal. lib. 14. meth apb. 2.

is of colour redd, hard, inflameth ſore, accompanied oftentimes with fevers, and divers other accidents, of the which there are 2 ſorts. The true Phlegmon that is ingendered of blood being in any part more than is needful for the uſe thereof: The other proceedeth of unnaturall blood, altereth by ſome change, as by mixing one or more of the other humors

with

with it, so according to the domination of the humor it taketh the name, as for example, if the cholerick humor domane amongst the blood more than the rest of the humors, the humor shall be called Phlegmon Eresipilas, and in like manner in the rest, as Phlegmon Edematus, or Schirrus: so that these humors are seldome found alone, but mixed together.

Gal l.6.tumor. cap.5
Gal de diff. morb cap.12.

The causes are triple, primitive, antecedent and conjunct: the primitives are externall and first motives, like as great usage of meate which engendreth much blood, also all those things which may move the humors and provoke flurions; likewise falls, strokes, contusions, broken or bruised, excessive heate, labour, and such like. The antecedent cause is of great superfluity and abundance of blood, offending eyther in quantitie, qualitie, or both; also intemperancy, evil confirmation and colour of the part. The conjunct or continent cause is the blood or matter affixed in the afflicted part. The signes are inflamation, redneſſe, hardneſſe, fever, dolour, pulsation, chiefly being in maturity: the Judgements, the small ones doe often resolve, the great ones doe oftentimes apostume, and sometime doe engender into great sicknes, according to the evill disposition of the body and parts where it chanceth, as in mortification and schirrus: sometime it doth returne to the place from whence it came, as happeneth in the emunctors of the noble parts: as for the curation, it shall be reduced to four points: the first shall consist in good dyet, secondly, in staying of the tumor that floweth to the place or part: thirdly, in evacuating that which is within the place: fourthly, in correcting the accidents which often doe chance. As touching the first, which is good dyet, it shall be observed in sir things not naturalls, which must bee cold, contrary to the humor which is hot, sometime it must be cold and humid, using weake drinke, or in time of fever use only Ptisan with a pure cleane ayre, rest and keep thy belly lose, eyther by suppositors or glysters, & abstaine from women. If it happeneth with fever, the humor

Gal meth cat. lib. 1. & lib. 2.

Johannes Tagaltius Instit. Chirurg. lib. 1. de Phleg.

mor that floweth must be diverted, by taking away the cause as repletion of the evill humors, by bleeding & purgations, also by strengthening the part if it be weak. Likewise by frictions, ventosing, and binding of the part. The humor shall be evacuated divers wayes, according to the time or degree of the apostumes, in the beginning we must use repercussives made of whites of eggs, orecrate, Rose and Plantain waters, cataplasmes made of Bolarmenie, Terra sigillata, bark of Pomgarnet, henbane, oyle of roses, unguent rosat mesues, album rasis, diacalcithiseos, mingled with oyl of roses or pupilion.

Gal. 13 meth cap. 6

How to use the augmentation.

For the augmentation which is the second degree, we use repercussives and resolatives, made of mallowes, roses, Plantine, wormwood, barly-flower, oyl of camomile, orecrate, powder of roses, and myrtiles, sodden in wine, called sapa, rose water, vinegar, Saffron: Also yolks of Egge, with milk, bread, and a little Saffron, of which things you may make Cataplasmes, linements, fomentation, as you shall finde expedient: in the vigour we use repercussives and resolatives, in like force made of mallowes, parietarie, and althea rosted under the hot ashes, oyl of roses, camomile, with a little bean-flower.

Avicen. The declination how to be used.

In the declination we use only resolatives: *Avicen* doth counsaile to soften a little, which may be done with fomentations made of althea, origan, lintseed, fenigreck, with flowers of roses, and cammomile, which things must all be sodden in white wine with a little barley meal and honey: also unguent of Arrogon, Martiatum, Agrippa, de althea, de melloto diachilon parvum, unguentum resumptivum, orecratum, or enulatum, these or either of them may be used.

Galen.

We correct the accidents, which is the fourth point, as dolour, which must bee appeased by all means, when the great accidents, which often doe ensue, for the which we doe use oyl of roses, ware and wine sodden together, as counsaileth *Galen*.

Also cataplasmes of bread and milk, with butter and saffron,

from, water, oyl, of roſes, violets, cammomile, aniſeeds, or ſweet almonds. Likewiſe the flowers of mallows, cammomile and milelot ſodden in wine, putting thereto a little barly flower, goſe-greaſe, and linſeed. Alſo unguent roſat, and pupilion, if thoſe things be not ſufficient, we take the leaves of the henbane and poppie, roſted under the hot aſhes, then tempered with the juice of ſorrel and houſleek, putting to it a little hens greaſe and crocus. *Gal. lib. 1. ſimpli. ca. 6. & 13. meth. cap. 6.*

If the matter taketh the courſe inwardly to ſome noble part, we remedy it by application of ventoſſes and cornets, ſtraight ligatoures, and ſuch like.

If the matter doe come to a ſchirrous diſpoſition, we muſt uſe medicaments that ſoften and digeſt, like as you ſhall hear in the chap. of Schirrus.

If it tend to putrefaction, it muſt be helped by deep ſcarrifications, lavaments, cataplaſmes made of bean flower, ſodden in vinegar and honey, with ſuch other remedies as you ſhall hear in the chap. of Sangrena. *Gal. lib. 5. meth. ca. 13.*

It happeneth often times, that this tumor tendeth to ſuppuration, which is known by the great ſwelling and redneſs of the place, eminency, great heat, dolour, pulſation, feaver, and ſuch like. Theſe things being perceived, we paſſe from reſolatives to ſuppuratives, as to foment the place with hot water or oyl, alſo with honey and water mingled together, called *Hydroleon*: or a cataplaſme may be made of white flower ſodden in *Hydroleon*, with a little freſh butter, calfe, hens, or goſe-greaſe: Or you may make a ſuppurative of little roots, ſorrell, parietarie, and mallows, ſodden in *Hydroleon*, whereunto you ſhall add a little flower of fenegree and linſeed, oyl of lillies, with a little leaven. After it be taken from the fire, put to it two yolks of eggs: this remedy appeaſeth the dolour and procureth matter. For the ſame effect we uſe the emplaſter called *Diachilon magnum* or *Baſilicon*: the ſuppurative made, we know by the diminution of the accidents, and the tumor which is pointed, alſo by preſſing on it with the two thumbs, we finde it ſoft *Paulus lib 4. cap. 17.* *Gal. 2 ad glau. ca 7 & lib 5. ſimpl. cap 8. & aphe. 21. lib 1.*

with

Gal. 11 meth cap. 15. How to make the incision.

with great inundation: then if it open not shortly of it self, it must be done by a cauter or lancet, otherwise it waxeth hollow and putrified within: in the opening of it, there are three rules to be observed, as you have heard in the generall chapter: in making of your incision, let it be in the inferiour part, that the matter may evacuate the better, but take heed it evacuate not too much at one time: the incision must be made in length, eschewing nerves, sinows, veins, and arteries. *Avicen* counsaileth to open by the head which I do not observe: when it is opened we use the yolk of an egg, with a little Turpentine, and oyl of roses for a certain space, thereafter honey of roses, or syrop of roses, Mundificative *de appio. Apostulorum*, or other Mundificative set down in the tenth Book of this work: sometime I doe add a little *Aegipiack*, specially to those ulcers which withstand the former remedies. The ulcer being cleansed, I mingle a little *Terebinthin* and honey, with the powder of *Iris*, *Aloes*, and *Thus*, or a little *Unguentum aureum*, with these powders: thereafter, the plaster of *Diacalcytheos*, *desiccativum rubeum*, *Diapompholegos*, *Cerussa*, *Dominis*, & such like, that hath the virtue to siccatrice and heal the ulcer.

Avicen cap. 6. lib. 1. Gal. aph. 17. lib. 6. Celsi li. 7 cap. 2

Chapter III.

¶ Of Epinictis, Terminthus, Terebinthus, Figethlon, Fima, and Ectimata, which proceed of Phlegmon.

Because that the most part either of old or new writers, hath made small mention of those tumors. So that the young Chyrurgion may be the better instructed, I thought good to speak of them in this place, beginning with Epinictis, which is an evill pustule, browniss of colour and very painfull,

painfull, chiefly in the night: this ulcer by it self oftentimes doth occupie the corner of the eyes, avoiding a water sanguinolent, which the weth it to be ingendred of the like cause, as Carbuncle. Yet not so vehement, in respect it hath no communication with the contagion: for the cure whereof have recourse to the Chapter of Carbuncle. *Celsi. li. 5 cap. 28* *Paulus Lib. 4. cap. 9*

Terminthus is a tubercle or little tumor, almost of the same nature, proceeding of an hot burnt blood covered with little black round pustules, which by their vehement heat produce an eschar: it possesses for the most part the thighes, and is cured, as the former.

Therebinthus is thought by Oribasius to be a kinde of *Phima*. Upon it appeareth little black round pustules, which being opened, avoideth a filthy frothing matter, and is cured as for the former. *Paul. 4. cap. 29.*

Phigethlon is a tumor or inflamation in the glandulous parts, ingendered of an hot fiery blood, when it doth appear in the inguen, it is called *Bubo*. *Gal. 2. ad Glau. cap. 1.*

Amatus Lusitanus is of opinion, that this tumor proceedeth of a cholerick humor mingled with some pituit. There is a sort of it that appeareth under the axilla orter and jawes, or parotis cragg, and is pestiferous.

Of those small mention hath been made of our ancients, which maketh me believe they have not bin known in those hot Countryes: it is commonly with fever, sometime it commeth before the fever, other times after the same, proceeding of the like humor as Carbuncle, save only the matter is not so fiery and hot, but the cure is little different: in this ye must abstaine from repercussives in respect of the malignitie; use suppuratives, as counsaileth *Fernelius*. *Celsi. li. 5 ca. 28.* *Fer. li. 4 pa. 18.*

Phima is also a tumor in the inguen and parts glandulous, ingendered for the most part of the like humor, as the rest, it groweth slowly, and suppurateth hastily. It is thought by *Hippocrates*, not to occupie alwayes the ingnina: The Arabes termeth it *Raccodes*, which is a tumor in the privy parts.

parts. *Galen* sayth the like: for the cure use anodins, suppuratives, and mundificatives.

Gal. ad glau. cap. 1.

Hippo. lib 4. cap. 9

Plinius.

Ecthimata or Exanthemata are called by *Hippocrates* and some other Latine interpretors, such as *Plinius*, *Papulas*, which are little bubs or pustules, that break out by themselves through the skinn, sometime in the head, and are ingendred of a corrupt, malignant, grosse humor, thought by the learned to be the rest of the menstruous humor: yet it is mingled with some pituit, as sayth *Plinius*, and *Fernillius*. It is called by some Latine writers *variole*, or *pitnitæ ruptiones*, in vulgar, the small pockes: there is one sort of them called *morbilli* or *scepuli* which are white in the middest, and red in the borders, they are little blobs upon the skin, produced of an ebulition of blood, putrefaction of the ayre, ober great repletion of meat, specially fruit, retention of the moneths, or revolution of venomous blood: such blobs for certain, are discerned the first or second day, the third and fourth day they rise in tumors, and becomme white, thereafter crustous: yet, in some the malignitie is so great, that it doth not only corrupt the soft parts of the body, but also the solide and hard parts, as the bones, thereafter death ensueth, as I have divers times observed. As for the cure, in respect it is impertinent in this place, I will supersede the same to my Work of Infantment, where shall be particularly set down all the sorts of that disease, and others incident to young children, with their cures.

Plinius. Fernell.

Lonicerius Francofuencis. Paulus lib. 4. cap 8.

Chapter III.

¶ Of the Tumor, Furuncle, or Dothin, which proceed of Phlegmon.

Definition.

A Furuncle, is a tumor that is sharp pointed with inflemation and dolour, chiefly when it groweth to matter, and is

is ingendred of a thick humor in the soft parts, it groweth commonly to the bignesse of a doves eg, and is lesse then Phima, it occupieth for the most part the skin. *Celsus lib. 5 cap. 28*

Galen saith that Furuncle is a tumor procreate of the like humor, as the burgons of the face, and comes in all parts of the body, and is of two sorts; the one like little bubons, is hard, and cometh slow to maturation: the other is firey, hot, and inflameth, provoking fever, yet differs little from Phima, except it is harder and more sharpe. The causes are externall or internall: the internall cause is abundance of grosse corrupt blood, ever boyling and burning, like that of Carbuncle, the which nature separating it selfe from the most pure, as unprofitable and evill, sendeth it to the circumference or externall parts of the body, and ingendreth Furuncle: the externall cause, is in the vice of the skinne, wearing of unaccustomed clothes, sodainly taking cold after great heat, or vehement heat immediatly after cold: retention of the monethly courses. The signes, It is pointed, red coloured like Phlegmon, suppured after the same sort, and in that it differeth from the simple Carbuncle, when it occupied the skin only, it may easily be helped, but being more deep it is more painfull and malignant. The cure consisteth first in generall remedies, as purgations and bleeding, next lay on it a little Diachilon, with hens grease, or Basilicon. *Gal. lib. tumor contra natur.* Two sorts of Furuncle. The cause two fold. *Hip. lib. de humid usu.*

Galen counselleth to chew wheat in the mouth fasting, and lay it on it, or figs sodden in Hydromell: or Allom cloven in two, and mingled with honey and linget, also Henbane beaten with butter may be applyed: If it be deep and much inflamed, oftentimes it degenereth into Anthrax and Carbuncle, and in that case it must be cured, as you shall hear in their proper Chapters. *Gal. lib tumor contra natur. Paul. 4 cap. 19.*

Chapter V.

¶ Of Anthrax or Carbuncle.

Definition.

There is small difference betwéne Anthrax and Carbuncle, saving that Anthrax is the greeke word, and Carbuncle the Latine, and is so called, because it burneth the place where it is, like unto coales. Carbuncle is defined to be a pustule, inflamed, black, burning the place, it is sore with many blisters about it, as if it were burnt with fire or water.

Cause. Difference. *Tangacius lib 1. inst Chyrur.*

The cause is divers, according to the sundry kinds thereof: the cause of the simple Carbuncle is an ebulition of grosse blood, thick and hot, where it falleth in any place it burneth and maketh ulcers, with a scale, accompanied with great inflamation and dolour.

Signes.

The signes of the simple Carbuncle are these, there appeareth many little black pustules not eminent, sometime pale, which groweth sodainly red, with great inflamation about the place where it is, and is harder than it ought to be, the sick loseth appetite and coveteth sleep, accompanied with cold sweat and fevers.

Gal. li. 5. ca. 28 & lib 6. ca. 18.

The signes of the maligne, are vomiting continually, weak apetite, trembling, swounding, beating of the heart, the face waxeth white and livid.

Judgements.

The judgements, if it happeth neer the stomack or throat it telleth the respiration, as saith *Celsus*; that which ripeth and cometh to matter, is good; that which appeareth and vanisheth away, is mortall; that which is first red, then yellow is not evill, as saith *Avicen*; that which is first pale, and after black is evil: all these which are in the emunctores of the noble parts, be most dangerous.

Cure.

The cure consisteth in universal and particular remedies, the universals are a good dyet, which shall bee cold and humid, as you have heard in Phlegmon, resisting alwayes the

the malignitie of the humor: his drink must be made with sirop of Lymons, *Acetosi Simplicis, Capilli veneris, Granatorum, Bugloss.* with water of the said things: abstain from wine, and drink only water, as counsaileth *Celsus.* Use alwayes the tablets of *Diamargarita frigida*, conserves of roses, and buglosse, *bol armenie, terra sigillata*, and Ivorie in fine powder, of those ingredients you shall make opiats with sirop of Lymons and Triacle, using this epitheme on the noble parts, chiefly the heart. *Rec. aquæ scabiosæ, rosarum, nenuphris, an 2. unc. aquæ buglossi 1. unc. trochiscorum Rasis, camphori, an. 1. scrupul. corallorum rubrorum. 1. dragm. di. tria. santal & bolia armici an. 1. croci & aceti parum fiat epithema* use glisters and bleed much, as counsaileth *Galen*, in the same side the pain is on *usque ad animæ defectum.* The particular remedies are these, first we make deep scarrifications, and wash it with water and salt called *aqua marina*, we lay hoslesches on the scarrification, using a cataplasme on the part, of crummes of white bread, leaves of Plantine, Arnoglosse, flower of Lentills sodden in vinegar and hony. *Hippocrates* counsaileth to apply actuall cauters, or other causticke medicament, as oyl of Vitriol, unquenched Lime, arsenick on the part *quoniam in extremis morbis extrema sunt adhibenda remedia.* We apply also ventosies, and other medicines, which have the virtue to draw the venome from the noble parts.

Arnoldus lib. 3. brevi. cap. 22.

Celsus. lib 5. ibid.

Gal. 14. meth. & 2. ad Glau.

Paulus lib. 4. cap 25. Hippocrates.

Celsus.

Arnoldus de villa nova counsaileth for the extinguishing of the Carbuncle, only to take the powder of Coriander, well dryed and mingled with honey, and applyed it on the part. *Paulus* doth counsaile to seperate with a rasour the infected from the other parts, and raised from the root.

Arnoldus.

Gal lib. 13. meth. cap. 6.

Afterwards use this cataplasme to mitigate the pain and provoke the fall of the scale, composed of Linseed, Mallowes, violets, yolks of eggs, butter, and barly meal; for the sharpnesse of the humor put about the part infected *Unguentum de bolo*, and on the pustules, the pustules of *Andromon*, and *Musa*: When the scale is fallen, cleanse the ulcer

with ſirup of roſes, hony of roſes, and turpentine, mundifi-
catiue de appio, and ſuch like: which being done, ſiccatrize
and fill it up as other ulcers; ſome doe counſail to take Con-
ſolida major, and bray it betweẽ two ſtones and apply to it.

Agria, what it is Agria is likewiſe a puſtule malignant, of the nature of a Carbuncle, the ſkinn becommeth firſt red, in the end it eats and corrodes, but the cure is little different from a Carbuncle.

Chapter VI.

¶ Of Gangrena and Hiſtoriomen.

Definition. *Gal. 2. de locis affect. & 2. ad glauc. cap. 10.*

When the inflamation neither reſolveth, returneth inwardly, ſuppureth, nor becõmeth hard, it degenereth in Gangren, which is a mortification, not altogether of the part, but tending thereto by little and little, through the great violence of the inflamation: for thereby the veins and arteries are ſtopped in ſuch ſort, that the naturall heat cannot paſſe, ſo the part eaſily doth corrupt and conſume, and ſo wareth Gangrenat for lack of naturall and vitall ſpirits.

Cauſe. The cauſe is great quantity of blood in the member which letteth the ſpirits to paſſe, ſo bindeth and intercepteth the ſame in ſuch ſort, that the veins and arteries cannot work their tranſpiration and requiſite exhalation: ſo for lack of naturall heat, the member doth ſuffocate. As alſo great application of cold medicaments in Phlegmon & Herefipilis, or by ſome violent externall cauſe, chiefly in the foot or hands which happeneth oftentimes by cold, criſis of fevers, or malignant and venomous maladies. As alſo ſtraight ligatours, contuſions, ſtrokes, falls, or biting of venomous beaſts, chiefly in the wayes and paſſages where the ſpirits doe paſs, or by ſome pointed ſtroke upon the membrains, tendons,

Gal. 2. ad glau.

or

or nervous parts. The signes are, if it come of inflamation, we perceive the red colour, dolour, pulsation and feeling to decay, it waxed pale, soft and black, and in pressing on it with the fingers, it falleth down and riseth not again, but if it proceed of cold, we perceive great beating, pain, coldnesse without motion or feeling, accompanied with trembling and shaking, and if it proceed by straight ligatours, binding, hurts, or biting of venomous beasts, we know by the precedent signes & others, according to the diversity of the cause. Signes.

The Judgements are, if it be not helped presently, the force of it is such that the part dieth presently, as also the parts adjacent, and so causeth death of the whole body: but if the muscles and nerves be not hurt, and the person young and of good constitution, and well handled in the beginning, it is not so difficult. Judgements.

Celsus 5 ca. 27.

The Cure, after generall remedies, like as purgations, bleeding, and diet, it consists in using of corrosives with deep scarrifications on the part, then washing it with Aqua marina, then applying Cataplasmes made of flower of beans, barly, orob, and lupines sodden in vinegar, putting thereunto a little roses, myrhe, mirtles, and Aristolochia, washing often the sore with orimel, decoction of *Absinthium, utrinsq; centorium gentiana*, and such like: beware of cold, and use warm clothes, and all other such things as hath the virtue to entertain the natural heat: you may also use Aqua vitæ, with triacle, Mithridate, and a little Calcantum, if it be rebellious. And if it be necessary to use more strong remedies, you shall take Egiptiack and mingle therewith a little Arsenick or Orpiment, and apply to the scarifications, which remedies must all be used with good judgement; noting well when the Gangren ceaseth, and the fury of the malady be almost past, then cause the scarr to fall with hony, butter, yolks of eggs, and other fit remedies. If none of those prevail, but that the Gangren doth become in Sphacell, we must use the like cure as we doe in Sphacell, to fortifie the rest of the body as you have heard.

Gal. 2. ad glau. cap. 9.

Paulus lib. 4. cap. 13.

Cataplasme for Gangrena.

Celsus lib. 5. ca. 26.

Chapter VII.

¶ Of Ephaſell.

Difference. *Gal 2. ad glau cap. 8.*

We muſt here conſider the difference betwixt Gangrene and Sphaſell, and know that Gangren is the latin word, it is a mortification of the parts it happeneth in, except the bones, and is curable: but Sphaſell or ſideration, is a mortification both of the ſoft and ſolid parts, which is no way remedied but by amputation, ſom do call it S. Anthony or S. Martials fire.

Cauſe. *Albucraſis, lib 2. cap 87.*

The cauſes are like as you have heard in Gangrena, beſides it is joyned with the evil diſpoſition of the humor venomous, which for the moſt part doth corrupt the bone before it maketh any external ſhew, it doth ſomtime proceed of old ulcers, which have bin long oppreſſed with a rotten filthy matter, which corrupteth the bone, and cauſeth mortification. Likewiſe cold, as chanceth to people who are in priſons, ſhips, camps, or in cold countries, as oftentimes, happeneth in Sweden, and ſuch cold countries. Likewiſe biting of vipers, mad dogs, and other venemous beaſts.

Signes

The ſignes are theſe, the member waxeth black, like as it were burnt, afterwards it becommeth rotten, and in ſhort time it overthroweth the whole body, in ſuch ſort that the skin doth come from the fleſh.

Judgements *Celſ. li. 5 ca. 26.*

The judgements are, it is for the moſt part incurable, and commonly the patient dieth in cold ſweats.

Cure.

The cure conſiſteth in remedies general and particular. The generals ſhall conſiſt in purgations, dyet, and bleeding which may be obſerved alſo in the time of the obſtirpation, by ſuffering the blud to flowe, which both diſchargeth the part, impaſſeth the feaver and other evill accidents which might happen. It were good in this to uſe cordial remedies, both before and after the amputation for ſtrengthening of the body, as alſo to impaſſe the evill va-

uſe cordiall remedies before and after amputation,

pours

pours and fumes which might aſcend and make motion. For this purpoſe you may take a dram of Theriaca, with the water of the flowers of Borage and Bugloſſe, ſirop of roſes, and Bugloſſe may be uſed and applyed on the region of the heart; alſo epithems of Roſes and Bugloſſe water of each three ounces, with Vinegar, wherein Squilla hath been ſodden ſix drams, Theriaca, and Mithridate of each 2. drams, Camphir 2. ſcrup. with the three cordiall flowers, of each a little, Saffron 1. ſcrup. mingle all together and apply to the heart, with a little piece of ſcarlet cloth, making it warme before it be applyed: thereafter you ſhall goe to the amputation of the member, which ſhall be done in this manner. The friends being firſt advertiſed of the danger, becauſe that oftentimes death enſueth: for the which cauſe the learned Celſus calleth it a miſerable remedie, ſo that I thinke the expert Chyrurgions ſhould aſſay all remedies, before they come to that extream remedie, which is done with great danger, chiefly in doing of the operation, and that either for flure of blood, fear, faintneſs, ſounding after it is done. Likewiſe there happeneth often fevers, ravings, extream dolours, convulſions, cold ſweats, and oftentimes ſodain death: for the which the parents and friends ſhould be forewarned of the danger which may happen, and that they ſhould adviſe whether (upon hope of recovery) it be more expedient to aſſay that extream remedie, or otherwiſe to referr it into the hands of the Lord. Yet by our daily practiſe, the moſt part do uſe it, becauſe in ſo doing there is ſome hope of recovery: and in not ſo doing, there is nothing to be expected but ſuddain death, and better it is to looſe one member, than the whole body. As concerning the place of amputation there is diverſitie of opinions.

The manner of amputation. *Celſ. li. 5. ca. 26.*

Celſ. li 5. ca. de Sphac.

Hippocrates and ſome others counſaileth to cut in the joynt, alledging it to be more eaſie to be done, for in ſo doing the marrow is not diſcovered, as in other parts, nor the flure of blood ſo great. Others think beſt to cut four inches from the joynt, either above or under, according to the

The place of amputation.

the circumſcription of the putrifaction which is both more eaſie and ſurer than in the joynt.

4 Inches from the joynt.

For thoſe cauſes and divers other circumſtances which might be here alledged, I adviſe to make the inciſion four inches from the joynt in all amputations, except only when the mortification or riving of the bone end in the joynt, then it muſt be cut in the joynt, chiefly the joynt of the knee; alwayes it is hard to cicatrize and heal, by reaſon the end of the bone is ſpongious and humid, ſo the leather to conglutinate: but whereſoever you make your amputation, remember to mark it well with ink or others, and to cut rather a little of the whol, than to leave any portion of the infected. If any of the infected remain, it corrupteth the reſt, and ſo requireth new amputation, as I have often ſeen.

Situation of the ſick.

The place of amputation being ſo remarked, wee ſituate the ſick in a fit place, having reſpect both to the nature, qualitie of the part, and our own commoditie. For this purpoſe ſome doe ſet the ſick on a bed ſide for fear of ſincops. I my ſelf uſe only a chayre, which I finde moſt commodious both for the ſick and Chyrurgion, becauſe it may be commodiouſly placed: which done, you ſhall have two men to hold and attend upon the Patient, then the Chyrurgion ſhall command the ſick to bend out, and extend that member, to the end the skinn, veins, arteries, and nerves may be more lengthend, and after the amputation may bee more apparant to bee knit or cauterized. That being done, the Chyrurgion ſhall pluck up the skinn and muſcles as much as he can, thereafter he ſhall take a ſtrong ribben, and binde the member faſt about the place of the member, two inches above where the amputation ſhall be.

Binde the member with a ribben.

The uſage of this ribben or band is divers. Firſt, it holdeth the member hard and faſt, ſo that the inſtrument or inciſing knife may cut more ſurely. Secondly, that the ſelling of the whole parts may be ſtupified, and rendred inſenſible. Thirdly, that the flure of blood may be ſtayed. Fourthly, it holdeth up the skinn and muſcles which muſt cover

the

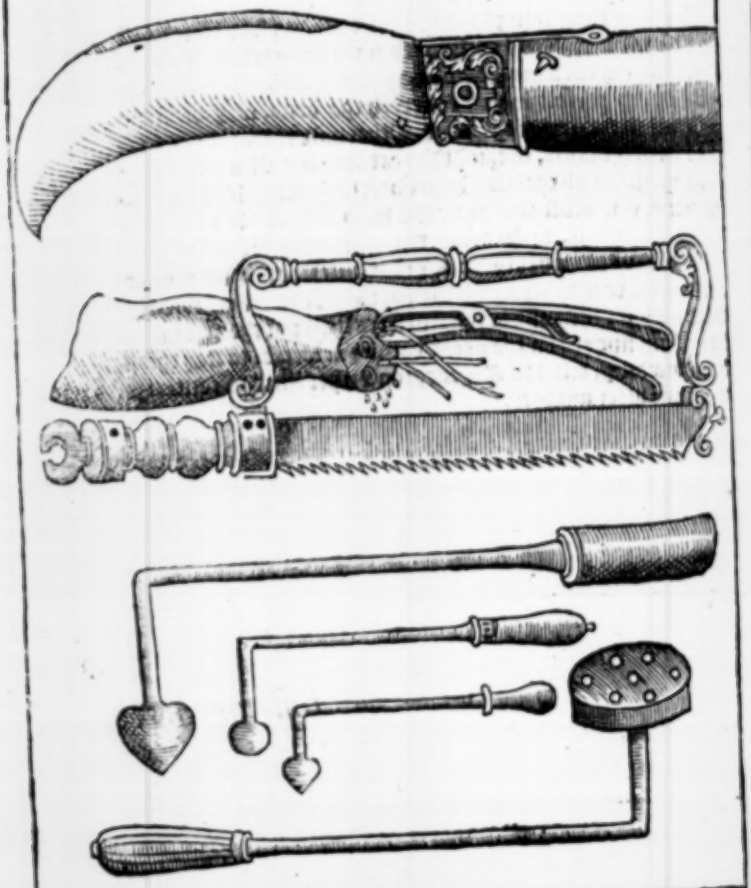
the bone after it be cut, and ſo it maketh it more eaſie to heal. The bandage then being thus made, wee cut the fleſh with a raſor or inciſing knife, which muſt be ſomewhat crooked to the forme of a hook or half moon.

The fleſh then being ſo cut to the bone, the ſaid bone muſt be diligently rubbed and ſcraped with the back of the ſayd knife, which back muſt be made purpoſely for that effect, to the end the perioſt which covereth the bone, may bee leſſe painfull in cutting of the bone. Otherwiſe it teareth and riveth with the ſame, ſo cauſeth great dolour: Alſo letteth the cutting, although the bone hath no ſæling of it ſelf. This being done, you muſt ſaw the bone with a ſharpe ſawe: then loſe the ligatour, draw down the skin, and cover the bone in all the pares; and if there be great putrifaction, let it bleed a little, for that diſchargeth the part and ſo is leſſe ſubject to inflamation: then one of the Aſſiſters ſhall put the extreamities of his fingers on the great vaine & arteries, to ſtay them from bleeding, till the Chyrurgion either knit or cauterize them one after another.

Rubb and ſcrape the bone.

Inſtruments,

Instruments, and Cauters actuals, for extirpation.



as he ſhall think expedient. But where there is putrefaction, we ſtay the flux of blood by Cauters actuals, and where there is no putrefaction, malignitie, nor humor venemous, we uſe the ligator. The Cauter or actuall fire maketh ſcale, ſtayeth bleeding, conſumeth and draweth into it the virulency and malignitie of the humor which is in that part, and in that point it is more ſure and better than knitting. In knitting we loſe much blood, and by drawing the veines with the back, decurbing, or other inſtrument, they doe breake. Alſo being knit, doe often unloſe, ſo that I find the fire more expedient, being done and applyed meanly. Then to doe it, we muſt have three or foure little inſtruments of Iron, crooked at the end, with a point in form of a button; of which, ſome be round, ſome flate, and ſome broad, to rub on the end of the bone. How to ſtay the flux of blood by actuall cauters.

It hath the virtue to dry and corroborate the ſame, being made red hot: then we take eyther of them and apply on the veines one after another, continuing them a certain ſpace till the ſcale be made, taking hed alwaies not to burn overmuch of the vein.

In amputation without putrefaction, I find the ligator reaſonable ſure, providing it be quickly done. To doe it firſt then ſhalt cauſe the aſſiſter as I have ſaid, to hold his fingers on the veines, letting one loſe, on the which then ſhalt take hold with the back Decurbin, taking a little of the fleſh or muſcles with it: then put through a needle with a ſtrong thread, knit with a double knot, tying a little of the fleſh with the veine, which will make it hold the better: but if it ſlip, as oft it happeneth, you ſhall firſt put through the needle in the utter ſkin, an inch above the wound, neere to the ſide of the vein, cauſe it to come forth by the other ſide of the veine, yet higher then the orifice of the veine: Then pul out your needle an inch from the part where it went in, then put a piece of cloth in two doubles betwixt the two threads, then tye it hard, to the end the knot enter not in the ſkinne. This way and forme muſt be uſed in the reſt of the veines.

as

as alſo in divers other parts of the body: The blood being ſo ſtayed, wee uſe an aſtringent powder, as this. *Rec. boli armenici* 3 ounces, *ſarine volatilis* 2 ounces, *picis, reſinæ, ſanguinis draconis an.* 1 *dragm.* of this powder you ſhall ſtraw on the wound with dry ſtar or caddeſſe. Thereafter an aſtringent or defenſive made of the aforeſaid powders, whites of eggs, and oyle of roſes, applyed on ſtore in like manner, the which ſtocks or caddeſſe muſt be wet in oricrate, and be of ſuch breadth as may cover the ſore, thereafter take a double cloth, not only ſufficient to cover the ſore parts, but likewiſe the parts adjacent, alſo wet in oricrate and anointed with the foreſaid defenſitive: The bands muſt be alſo wet in the ſaid oricrate, then bind it well in ſuch ſort that it be neither too ſtraight nor too ſlack, then ſcituate the member in good ſort, and remove it not for three daies, chiefly in winter, but that muſt be obſerved according to the accidents which doe happen.

Powder to ſtay the blood.

In changing of thoſe remedies, beware to take away the ſcarre or knot of thread, and for avoyding thereof wee rub firſt the part with cerot Galen, to the end the defenſive cleave not faſt to it.

If it happen any veine or artier open, you ſhall diſſolve a little Vitreoll in Vinegar, and lay on the veine or arterie with ſtor the breadth of a groat or ſix pence, this will preſently ſtay it, as I have often proved.

To ſtay an arterie or vaine if it open.

If it happen that two or three of the ſaid veines doe open, cauſe thy ſervant to put his fingers on them, and tye them as you have heard.

The ſecond dreſſing muſt be done in the ſame manner, with ſome aſtringent, chiefly on the veines and arteries, & ſo continue till there be no more ſcare of blood, which will continue eight or ten daies: On the reſt of the wound, you may uſe a digeſtive made after this ſorme.

Take Turpentine well waſhed in Plantane water 4 *unc.* honey of Roſes 1 *unc.* Barley flower half an ounce, two yolkes of eggs and a little ſaffron, incorporate all well together,

gether, and apply to the ſore till it be perfectly ſuppurated, then uſe mundificative *de appio apoſtulorum* or my own mundificative, with this emplaſter, compoſed of equall portions of *Diapalma* and red Deſiccative, for a time, next uſe this ſiccatrizant to the entire curation.

Take *tuthia præparata, plumbi crudi, antimonii crudi, corticis mali granati, balauſtiorum, nucis muſchatæ, boli armenici, ſanguinis draconis, an. drag.* 1. *accipiantur omnia ſimul cum tribus unciis unguenti diapompholigos & fiat magdalion bonæ conſiſtentiæ.*

In the mean time, if there be any exceſſe of fleſh, it muſt be corrected with powder of Allom, Savine, and Oker, or powder of Mercurie, taken in ſmall quantities: theſe or either of theſe may be applyed alone, or mingled with ſome Unguent. To corroll the over-growing fleſh.

Leggs

Legges of wood.



All the form of this operation is moſt learnedly and skilfully practiſed by my good friend Maſter James Hurvey, chief Chyrurgion to the Queens Majeſtie, who hath written divers learned books of Chyrurgery, and in practiſe hath excelled the moſt part in his time. Her Majeſties chief Chyrurgion.

But for further declaration of the premiſſes, I will recite a Hiſtory which happened during the ſiege at Paris: where, through great hunger, cold, and other miſeries, happened many grievous ſicknefſes, as Gangrens and mortifications: amongſt the which there was a Spaniſh ſouldier of that Regiment (whereof I was Chyrurgion major) who had a blackneſs or little ſpots in his foot and toes, as if they had bin burnt. I did cut of his toes and ſcarrified the reſt, and after uſed ſuch remedies that he ſhortly healed. Hiſtorie.

Soon after, happened the like in the other foot, which I would have cut and cured as the former: but he and his fellowes eſteemed it a deformitie, and would not ſuffer the ſame. So the griefe daily did augment with ſuch violence and furie, that by the adviſe of the beſt and learned Chyrurgions in Paris at that time, I was conſtrained to cut off the whole legg, and ſo did help him. At this ſame time there was a wife in the coyning houſe of Paris, at which time the Citty being ſcarce of money, and hardly beſieged, they did coyn braſſe and copper, ſo this woman by the continuall ſorting and telling of this coyn, there did enter of the ewze of that braſſe and copper under the nailes of her fingers, which infected the whole points thereof, ſhortly they became black and inſenſible: whereupon deep ſcarrifications were made, with lavements, & all other fit remedies which might be adviſed; notwithſtanding we were conſtrained to cut off three of the formoſt joynts of the fingers. Thus have I alleadged to ſhew the danger of delay, that if any ſuch thing happen, it ſhould not be deferred; but diligently proceed as you have heard. And thus I end the Tumors which proceed of the ſanguine humor, and ſhall proſecute the reſt God willing. Hiſtorie.

Chapter VIII.

¶ Of the extirpation of superfluous fingers and toes, with such as are corrupt and bruised.

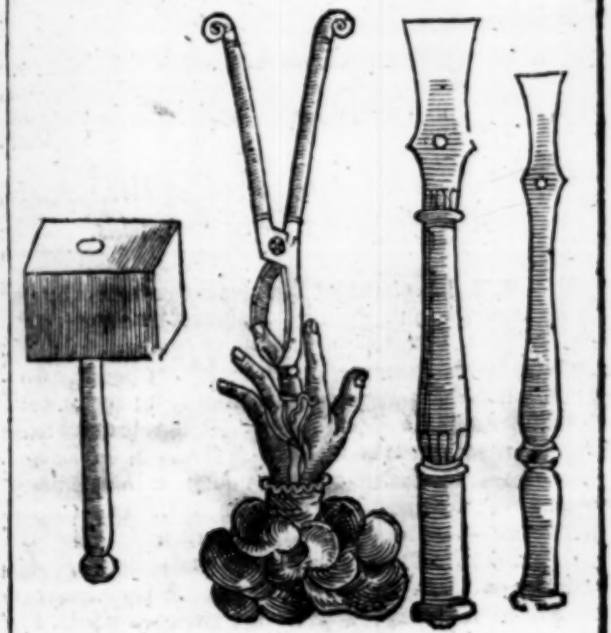
Six fingers or toes.

IT happeneth oftentimes in the hands and feet, that there is implanted against nature, six fingers or toes, or more; to the great deformitie of the part, and hinderance of the action: There may likewise happen in those parts Gangrens and mortifications for diverse causes, as you have heard in the last Chapter: Like as you shall hear in the Chapter of Panaris and Paranychia, the which maketh oftentimes corruption in the bone before any outward appearance, so that for either of those causes, the Chyrurgion is oftentimes constrained to cut off the whole finger, or at least one joynt, or some portion thereof, if fit remedies prevaile not: then to doe that operation, you shall be meeter, and with smallest pain to be done, with Tenals incisives.

Pan. li. 6. ca. 43.

Tenals

Tenals inciſiues, to cut off fingers and toes.



How to take them away. *Alb. li 2. 47.*

which in one inſtant cut both fleſh and bones. Some for this purpoſe doe uſe a ſharpe Chizell and a Mallet, laying the member on a blocke, and ſo cuts it off, which form neither doe I think ſo good, nor ſo methodicall as the former. The extirpation being done of one joynt, two, or halfe, as ſhall be requiſite, you ſhall ſtay the flux of blood, thereafter follows out the reſt of the cures, as you have heard in the precedent Chapter. Here followeth thoſe Tumors which proceede of Choller.

Chapter IX.

¶ Of Tumors bilious called by the Latines *Flava bilis*, and firſt of *Eryſipelas*.

Haly Abbas. lib. 2. cap 8.

Self. li. 3 ca 29

Differences. *Arnoldus de villa nova Gal. 2 ad glau.*

Cauſe.

We have ſaid that there were two ſorts of pote tumors, to wit, Phlegmon, whereof we have ſpoken, and Ereſipelas, whereof wee meane to ſpeake. Ereſipelas, is a tumor which proceedeth of the cholericke humor, accompanied with great inflamation and dolour, for the moſt part not eminent without pulſation: It is pale or red coloured, and is called by the Greekes *Eriſipelas quoniam adhæret Pilis*: for, by the ſubtiltie of that humor, it commeth to the ſuperfice of the skinne, and is called in Latine *Ignis ſacer*, in the vulgar, Wilde fire. It differeth little from Phlegmon. Some eſteem them to differ, by reaſon the one proceedeth of blood, and the other of Choller: They differ alſo in colour, the one being red, the other oftentimes pale. Phlegmon entreth deep in the muſcles, the other remaineth in the skinne. Of this diſeaſe there are two ſorts, the true Ereſipelas which cometh of Choller only, but when it is mingled with the groſſe humors, there cometh three kinds of it, as you have heard in Phlegmon. The cauſe of this tumor is abound-

dance

dance of cholerick humor, great heat of the Sun, ſtrokes, falls, and uſing of hot medicaments which maweth ſtarven, and draweth humor to any part of the body.

The Signes are thoſe, the tumor is very vehement, burning hot, dolorous, and mordicant, it doth ſeldome come to maturity, it appeareth oftentimes in the neck and face, by reaſon of the tenderneſſe of the skinn, the colour is not perfect red, but mungled, and in ſomewhat pale. When it is touched, it doth ſuddainly vaniſh, and ſhortly returneth again. It is dolorous without great pulſation, yet with great feaver, not unlike to the feaver Tertiane, it beginneth for the moſt part with pain in the thighes, and tumor in the liskes or inguen. Signes. Tagaultus lib. 1. cap 8.

The Judgements, the ſimple Erefipelas endeth rather by reſolution, than ſuppuration. The other, which Celſus calleth wild fire or *Ignis ſacer*, participates, with the excrementous parts of the cholerick humor, which being more thick doth not paſſe, ſo exulcerateth, which is better than if it ſtrike in: that which commeth forth, is good; that which appeareth in the face and in wounds, is evill; thoſe which happeneth in the matrix is mortall, alſo cauſeth the death of the fruit; thoſe which appear in the head are very dangerous, and if good remedies be not uſed, the party dyeth, as ſayth Paulus Ægineta. Judgements. Celſus lib. 5. cap. 28. Hippo. aph. 10. lib. 7. Hippo. aph. lib. 6.

As touching the cure, there are two things to be obſerved, evacation generall, diverſion, corroboration of the part recipient, & refrigeration with conſolidation of the part: the way of life muſt be cold and humid, contrary to the humor which is hot and drie, as you have heard in the generall Chapter. Abſtaine from wine and other ſtrong drink, all things that are ſwart, ſower, and bitter ſauces, from anger and vehement exerciſe, great heat, and ſuch like. The humor muſt be evacuated by purgations, gliſters, bleeding, and ſometime ſcarrified, if it become livide, being firſt fomented with hot water, uſing things on the ſore which bee cold and humid, and that with great Judgement. Apply on the ſore the juice Cure. Paul. 4 ca. 21. Celſ. lib 5. ca. 26.

or water of Solanum, Houſleke, Lettice, Succorie, Umbilicus Veneris, Cucumber, wet a cloth therein and apply: When it is in the face, cold water and oricrate may be uſed, as counſaileth Galen and Avicen. For the ſame purpoſe I doe often uſe *Serot Galen* oft waſhed in Roſe and Plantane water, as alſo *Roſarum meſues*: if there be vehement dolour as often chanceth, the roots and leaves of Henbane roſted under the aſhes, and mingled with a little popilion, is very good; alſo *Unguentum album cum camphora*. Likewiſe a cataplaſme of barley flower, linſeed ſodden in Hydromel or oricrate, putting to it a little powder of Camomile, and oyl of Roſes, all thoſe remedies muſt be liquide and often removed, and the ſore well cleanſed that nothing remain on it, if it be come to a bile or ulcer, and is cured as Herpes.

To cure it in the face.

Formica. Error of the Chyrurgions.

As touching *Formica* & *Ignis perſicus*, the ſignes and cure differeth little from Eresipelas yet you muſt note that divers Chyrurgions doe and have committed errour in the cure of this diſeaſe, eſteeming it to proceed of a malignant furious humor, for the which they ever apply cold medicaments not regarding purgations, bleeding, comforting of the part, neither the time when theſe cold medicaments or reſolatives ſhould be applyed. For the which I have ſometime ſeen enſue Gangren and mortification, wherefore the skilfull Chyrurgion ſhould abſtain from thoſe cold medicaments: when the inflamation, redneſſe, and heat doth diminiſh, you may apply ſuch things as you have heard before. Thus I have thought good to advertiſe the young Chyrurgion, becauſe ſuch accidents happen, as I have ſometime remarked.

Chapter X.

Of Herpes.

Gal. ad glau. cap. 1.

Herpes, is a little ulcer accompanied with tumor, proceeding of a pure bilious humor, without mixture of any other humors, it occupieth moſt commonly the extremi-

ties

ties and outward parts of the skinn, and is comprehended under Erefipelas, like as Formica and Impetigo, which are little eholerick puſtules: the old Greekes doe make three kindes of it. The firſt, is made of the thinn choller which burneth the skinn, and is called ſimple Herpes. The ſecond, is made of a more thick choller, which ulcerateth a great part of the skinn, and is named by the vulgar Wilde-fire, or Herpes depaſcens, becauſe it eateth and conſumeth the skinn to fleſh. The third kinde, is made of choller and pituit together, accompanied with ſome malignitie, as commonly it happeneth to thoſe who are infected with the Neapolitan or French diſeaſe. It is called by our ancients *Herpes miliaris*, becauſe the puſtules of it are like unto the grain called *Milium*. Theſe puſtules have divers denominations, ſome call them *papulæ* or *pituitæ eruptionis*: others doe call them *Eſthiomata*, ſome doe call them *Exanthemata*. The Cauſe and Signes differ not from thoſe which you have heard in the precedent Chapter. As for the cure it doth conſiſt in three parts, firſt in ſtaying the fluxion by evacuation univerſall, provocation of urine, and good diet, as in Erefipelas. Secondly, in evacuating that which is in the place, by ſuch things as have the virtue to diſcuſſe, digeſt, and dry lightly, and not humect: then in the beginning you ſhall uſe Vine leaves, Plantine, Goſe-berry leaves, Arnogloſſe, putting thereto a little Barly flower, with ſome honey, alſo the barks of the Pomgranet diſſolved in wine, with a little fine flower made in form of a cataplaſme. The third intention is in drying up the ulcers, for all ulcers whatſoever require deſiccation by gentle medicaments, excepting alwayes the maligne ulcers, in the which you muſt uſe more ſtrong and mordicant remedies. Firſt, you ſhall uſe fomentations of Roſes and Plantaine ſodden in wine or water and an unguent made of oyl of Walnutts and Waxe, thereafter waſhed well in Smiths water, alſo *Unguent roſat* is good: or this unguent thus made. *Rec. Unguenti populionis ſerati refrigerantis Galeni ceruſcæ an. drach. un. dim. litargyri. unc.*

Difference.

Gal. Comment. 4. ſuo 45. lib. 6.

Divers denominations of Herpes.

Cure.

Gal. 2. ad glauc. & 14. meth. cap. 2.

Part. 5. ca. 20.

3. *olei roſacei unc.* 1. *malaxentur omnia ſimul & fiat unguentum.* The other puſtules, like as *Formica* and *Impetigo* are cured commonly by generall evacuations. As for other deſedations of the skinn, which proceed of the melancholick or cholerick humor, they are cured by univerſall evacuations, ſweating, bathing, elſe by applying ſome ungnent on the part affected, like as *Unguentum Enulatum*, putting thereto a little *Mercurie*. It is excellent for this purpoſe, as alſo to kill the itch which happeneth to yong children. Or this, take Enula Campagne roots, ſæth them in the juice of Plan-
Regrau tra. 2. tane, Fumuterie, yolks of Eggs, Hoggs greaſe or freſh butter, being all mingled together, put thereto a little brimſtone well purified with oyl of *Hyſericon*, make an unguent of good conſiſtence.

Chapter XI.

Of Tumors, which proceed of the pituitous humor, and firſt of *Oedema*.

Having ſpoken of the two hot tumors, and of thoſe which commonly come of them: now in like manner I ſhall ſhew you of the two cold tumors, the one ingendred of melancholy, as you ſhall hear at length in that Chap. the other of Flegm or pituit. Oedema is a ſoft tumor with-
Definition. Gal 2. ad glau. cap. 3. out dolour, white colcured. Of it there are two ſorts, as of
Difference. Phlegmon; the one the true naturall Oedema, ingendered of the pure Phlegmatick humor; the other is made of Flegmon, mingled with the other three humors, and taketh divers names according to the principall humors, as you have heard. And like as there is two ſorts of it; ſo it may be named two wayes, to wit, either Malady or Symptome of Malady, as happeneth in the feet, and leggs. In ſuch as

are

are oppreſſed with abundance of cold watry humors, called bythe Phiſitions Cachechickes. Also thoſe which are become Edematickes through long ſickneſſe, which accidents are called Maladies, and they require no particular curation, ſave only rubbing the part with oyl and ſalt, water and ſalt, or cricrate, wetting a cloth therein, and lay on it: Alſo ſtrong Claret wine mixed with Smiths water, and apply it warm after the ſame forme, the wine doth corroborate and dry. *Gal aph. 2 ſect. 1. & lib. 1.*

The Cauſe is a phlegmatick fluxion of humors, pituitous and flatuous in any part of the body: Alſo imbecillitie of the part which receiveth, and can neither digeſt nor expell that which is hurtfull, alſo great idleneſſe. The tokens of theſe, the tumor is ſoft, cold: in preſſing on it with thy fingers, there remaineth a hole, and riſeth not again. It is clear, and not dolorous, it happeneth oftenest in the weakeſt parts, as in the joynts and glandulous, and in the extremities, as in the face, leggs, and feet, cheifly in cold weather, and old people or after long ſickneſſes, in people that be full of humors, and make no exerciſe. Cauſe. *Gal 2. ad glau. cap. 3.*

The Judgements, this tumor hath four degrees or times, as others have, the beginning, augmentation, ſtate, and declination. It happeneth oftner in Winter then in Sommer, becauſe that ſeaſon doth produce the cold phlegmatick humor rather than any other. This tumor turneth ſeldome in matter: except in hot places, by reaſon the matter is cold, it endeth oftentimes by reſolution: Sometime it turneth to Schirr, nodoſities, or ſome other cold abceſſe, which happeneth by the great uſage of digeſtives, which maketh the matter ware hard. *Judgements. It hath four degrees.*

In the Cure there are two points to be obſerved: firſt, to divert the fluxion by remedies that hath the virtue to cleanſe the pituitous humor called Phlegmagogis, as Diacatolicon, Diaphenicon, Diacartami, Agrick, Pilula, Cochia, Diaturbith, and ſuch like. For the adminiſtration of the which, you ſhall uſe the counſaile of the expert Phiſition or Chyrurgion: as alſo in dyet tending to hot and dry: eate roſted Cure.

rosted meats rather than sodden, but a little quantity, abstain from all things that bréd flegmon, like as fruits, pottage, chéese, fish, hearbs, water fowles, sadnesse, and much sléep, drink wine with little water, use well baked bread, with things to corroborate the noble parts. Abstain from women, chiefly the sick being weak: yet some doe commend the usage of women in maladies pituitous, for it heateth and dryeth, use moderate exercise, hold over the belly lose: abstain from bathes, and all things that humect: also from bléeding, although it be commended by Guydo for it is hard to find in a body that is phletorick a true Edema. The second intention consisteth in taking away that which is in the place, which shall bée done according to the times and degrees of the tumor: first then you shall use medicaments repercussives, and discutients, which shall be weak and not strong.

Gal. li. de atte nu. vict. us. ca. 1

Cae. 2. de fasi. tuen.

Guido tract. 2. de apost.

Ga. 4 meth. ca. 4. & 2 ad glauc.

Galen doth much commend oxicrate, by reason the vinegar repelleth by the cold virtue, and resolveth by the dry virtue: if it be not sufficient, mixe with it a few ashes of the Oake trée, *sal niter.* and some Claret wine: also the emplaster *de vigo.* or a fomentation made of Camomile, Pelliot, Rosemarie, Sage, Wormewood, Origan, Isope, and Red-roses, of each one a handfull salt and sulphure, of each one an ounce, séeth them all in Smiths water, with a little vinegar, and foment the part with a spung or cloth: you may also make a *Lixivium* of the cinders or ashes of the fig or vine trée, as counsaileth Avicen, it dryeth and cleanseth mightily. If néed be, of stronger desiccation, use this reme-

Pauli 4 ca. 27 Actius tract. 2 cap 3.

Brunus lib. 2.

dy set down by Brunus; take Allom, Sulphure, Pytche, and Salt, of each a like quantity, mixe all with vinegar, of Roses make aligament. For the same purpose you may make cataplasmes of flowers Beanes, Lentiles, and bran sodden in vinegar, putting thereto Aniséeds, Pytill, or Iris, and plaster of melilote is also good.

Rogerus also counsaileth to take juice of walwort, Sorrell, and Marrubium, take of every one of them a reasonable quantity,

quantity, and ſeeth them with *Unguentum de althea* 1. honie, oyl, and butter, make a cataplaſme thereof. If it war hard, yeu ſhall uſe this *Rec. Axunge. bubuli unc.* 3. *galb bdelli ammo. in aceto diſſolutorum ſtag. unc.* 1. *picis unc. ſemiſſ. therebinthinæ.* 2. *unc. myrrhæ drach.* 3. *corticis thuris drach.* 2. *olei veteris unc.* 2. *fiat unguentum.* If it tend to ſuppuration as often happeneth in hot parts, uſe this ſuppurative, take the roots of althea, 3. unc. Lillie roots, 2. unc. Camomile and Melilot of each one a little handfull, flowre of Orobs and Fenegreek, unc. 1. beat all theſe and mixe with Hennis greaſe, butter, oyl of Lillies, and Camomile, of each half an unc. make a cataplaſme, cleanſe the ulcer, and cure it as other Apoſthumes. If it ware hard and ſchirrus, cure it as yeu ſhall hear in the Chapter of Schir.

Comment. in aph 41. *l.b.* 1.

If it tend to ſuppuration.

Chapter XII.

¶ Of the windy Tumors that depend of *Edema*.

YEE have heard in the generall chapter, divers kinds of phlegmatick tumors which pertaine to Edema, whereof I will now ſpeak, beginning with the windy tumors, which are nothing elſe but certaine winds and inflations, ingendered by a ſpirit thick and vaporous and not of a ſubtill and aierius ſubſtance. Sometime thoſe winds are incloſed under the ſkin and within the membraines, which maketh diſtention, ſometime doleur according to the part where it is. They are ſometime in the ventricle, puddings, and capacity betwixt the puddings, and periton, as in Tympanies, which ſound like a drumm. Thoſe winds are ſometime diſperſed amongſt the muſcles, which is properly inflation, & differeth from Edema, for in preſſing on it with the fingers

Gal. 13. *meth. cap* 4.

Definition.

Avicen lib. 4. *cap.* 2.

The place where they are.

Diſference.

fingers, the print or seal doth not remain. The other kind of it doth approach neer unto Oedema, which is, the flatuosities dispersed in other parts musculous.

Gal. 2. ad Glau. cap 6.

Cause. Gal lib. symp. caus.

The Cause of tumor, is too much usage of cold flatuous meats, phlegmatick, which causeth these winds. The cause also may be in the ventricle and guts, in like manner in the obstruction and straightnes of the passages, and imbecility of the naturall heat, sayth Galen.

Signes. Gal 2 ad Glau. cap 6. Paul. l. 4. ca. 28.

The Signes are Tumor, softnes more clear than Oedema; and by pressing on it with the fingers there remaineth no mark as in Oedema: by knocking on it, it soundeth like a bladder full of wind, and in that point it differeth also from Oedema.

Cure.

The Cure doth consist in two points; first, in diet which shall be hot and dry, eating little and of light digestion, good bread of wheat well baked, and salted, using things to corroborate the naturall heat, discusse the thick cold vapours, and to attenuate. Also to corroborate the ventricle with aromatick things and electuaries, as Diacalamintho, aromatico Gariophilato, Diagalanga, Rose, and such like; Eate good flesh, as Mutton, Veal, and such like, rather rosted than sodden, the drink must be good Claret or White wine.

Ca. ad finem lib 4 de San. tuend.

The second intention consisteth in evacuation of the humor which is in the part, by topicall remedies, which have the virtue to clarifie and make the skinn thinn, to the end the vapours may passe out more easily: such are called discutients or carminatives, like as Aniseeds, Fennell, Isope, Parsly, *Baccalauri*, Juniper, Paritarie, Camomile, and Melilot, oyl of Iryn, and Bayes: Of those we may make cataplasmes, somentations, or larives, as shall bee thought expedient: Also livements of Camomile, Rue, Lillies, and a little aquavite, or the emplaster called *Baccalauri, oxycroci, & de vigo*, mixed together make an emplaister and lay on the sore: also a new water sponge wet in larive, or *Lana succida*, wet in warm wine and oyl, and applyed. If those vapours or winds make dolour, as commonly happeneth

Gal. 14. meth. cap. 34.

peneth in the cholerick paſſion: firſt, you ſhall appeaſe the dolour, then evacuate the matter, which ſhall be done accor-ding to the habitude of the body where it is, and diſcretion of the learned Chyrurgeon, uſe likewiſe gliſters carminatives, If thoſe flatuoſities be in the inteſtines, you may apply three or four great ventoſies on the belly. If it make dolour, how to heal it. Paul. 4 ca. 8.

Chapter XIII.

Of the watry Tumors which depend on *Oedema*.

This tumor is a water or ſeroſitie, gathered together in any part of the body, but ſpecially betwixt the skinne and fleſh. The ſignes are like to the true Oedema, but the tumor is looſer and doth not ſo reſiſt the twitch, neyther doth it ſound like wind, as the other. It is likewiſe more cleer, chiefly betwixt you and the light, as ye ſhall heare in *Hernia Aquoſa*. The Judgements, it happeneth oftner in the extremities, as in the feet, joynts and cods, than in other places, becauſe the watry humor doth eaſily deſcend, and dulleth the natural heate in thoſe parts. The Cure differeth little from the true Oedema, and as it occupieth divers parts of our bodies, it taketh likewiſe divers names, as if it bee conteined within the periton, it is called a ſpice of Hydropſy termed Aſcites, and that ſeroſitie deſcending in the Scrotum or Cods, is called Hydrocelon. If that watry humor come in the head, as ſomtimes happeneth under the muſcles, pericrani, or skin, it is called Hydrocephalon. If this bitter watry humor, either for the rottennеſſe or ebullition, become mixed with the blood in any part, it is called Phlictmas, which are little blisters or brownish blobs, which commonly happen in the hands, for the cure of thoſe you ſhall heare at length in the proper Chapter. Paul. 9 ca. 27 Signes. Judgements. Cure. Gal. 8. 3. c. 2.

Chap-

Chapter XIIII.

¶ Of the Tumors Phlegmaticks called *Atheorema*, *Steotema*, and *Melliſeris*.

Pall. 6. ca. 3. The manner whereof they are compoſed *Atheorema.*

Thoſe tumors are commonly called excreſſenſes phlegmaticks, by reaſon they proceed of the plegmatick humor; yet they differ from the other tumors, becauſe they are incloſed in a membrain, little bagg, or cheſt: they are compoſed of divers ſorts of ſtrange matter, by the which they have taken their names, as hath been remarked by the moſt learned amongſt the antients. Atheorema is ſo called, becauſe in it is contained a matter like grewell or pottage, called by the Greeks Athera. Steotema is ſo called, by reaſon in it is contained a humor like greaſe, called by the Greeks Stear. Melliſeris is ſo called, becauſe in it is contained a matter both in colour and conſiſtance like unto hony, called by the Greeks Meli, and is the hardeſt of them three to heal. As for Brencoceli, Ganglion, Teſtudo, and the reſidue, I ſhall ſpeak hereafter in the particular tumors. Thoſe tumors doe happen moſt commonly in membrainous places, and where there is ſcarſity of fleſh, as in the joynts, hands, head, and divers parts of the face.

Steotema.

Melliſeris.

Scituation.

Avicen 25.

Cauſe.

Primitive.

The cauſe is primitive, antecedent, and conjunct. The primitive or firſt motive, is ſtrokes, falls, violent forces, immoderate eating and drinking. The cauſe antecedent, is abound ance of humors, chiefly of the phlegmatick naturall, ingendered chiefly by evil dyet. The conjunct cauſe, is the divers kinds of matter contained in the part.

Cauſe Antecedent.

Conjunct.

Signes.

The ſignes, they appear by little and little without either dolour or inflamation preceding; nevertheleſs, by reaſon of the diverſity of the ſubſtances contained in them, they have divers ſignes.

The form of *Atheorema.*

The Atheorema is long in figure, and in preſſing on it with the finger, it goeth in ſlowly, & returneth not ſodainly, it

it is soft without dolour. The Colour is (of the skinn) naturall, in it is found sometime with the matter, hair, bones, and such like. Colour. Matter.

The signes of Steotema is hardnesse, and if it gee in, in pressing on it, it returneth not easily: it is large at the root, in the which is contained, with the matter accustomed, bones, cotten, and such like. Of the which I did finde great quantitie in the knee of an Nunn, whom I did cure at Paris. It differeth from Atheorema both in figure, and substance, the figure being more round, and the substance more thinn. The forms of *Steotema*. Matter.

The signes of Melleseris is great softnesse, in touching, subtill and and clear: in pressing on it, it geeth in easily, and likewise doth return, it is round in figure, in it is contained besides the matter accustomed, a gravelly hard matter. The form of *Melleseris*. Matter.

Those tumors for the most partare little at the beginning, but by processe of time groweth very great, some very hard, and in some of them is contained a very strange matter, like as hair, bones, cotten, gravell, sometimes little animals like Bees, the which be all inclosed in a bagg or chest, as hath been sayd.

In the Cure of those, there is one simple intention to be done, to wit, evacuation of the matter contained in the place, which is done either by Launcet, Cauter potentiall, or cauticke stone, not evacuating all the matter at one time: the overture must be proportionable to the tumor, which should be observed in opening of all tumors: Those tumors are sometime inserted with veines, arteries, nerves, & tendons, for the which great dexterity would be used in the operation, specially in taking away of the bagg wherein the matter is contained, that you offend not the former parts: For oftentimes there commeth great flux of blood, as I have sometime seen, chiefly in the temples. Cure. Great dexterity in the operation of them.

The tumor being opened, and the membrain discovered, which will appear white, you must seperate the same gently from the flesh, either with your spyle or other fit instrument proper to pull it out, with that which in it is contai- *Celsus lib. 5 cap. 28.*

ned

ned, and if there remain any portion thereof, you shall use such medicaments for the cleansing of it, as you have heard in other tumors: the matter being evacated and the membraine remaining wherein it was inclosed, the same must be wholy consumed, and wholy cleansed away, otherwise it will grow again as before: We use to consume that membraine with powder of Mercury, Egyptiack, and such like, alwaies with discretion for feare of inflamation, thereafter incarnate and close the wound, as in others you have heard: some doe use resolatives in those tumors, which are both tedious and uncertaine. There are certaine other tumors phlegmatickes, like as Talpa, Napta, or Natha, Testudo, Gangleon, Nodus & Lupea, which tumors doe all depend on the former, yet little mention hath beene made of them by our ancients. Those tumors do not much differ from the former, neither in the causes nor signes: they doe occupy for the most part the dry parts, as the other which are empty of flesh, like as the head, face, joynts, hands and feete, as sayeth Avicen. The cure of such are little different from the former except that some of them be oftner cured by resolution, as you shall heare in the booke of Tumors in particular, speaking of those Tumors.

The membraine must be consumed, and how.

Paulus lib. 4. Æginæ 15.

Chapter XV.

¶ Of the Tumors engendered of the melancholick humor, called by the Latines *Atrabilis*, or *Nigra cholera*, and first *Schirre*.

Seeing I have sufficiently spoken of the tumors ingendred of the sanguine, cholerick, and pituitous humors: Now it resteth to speak of those which proceed of melancholy,

tie, called tumors schirrous, for the Greeke word Schir doth signifie hardnesse. Schir is a hard tumor with little dolour or feeling: of the which there are two kinds, the one is called the true exquisite Schir, and the other the false. The true and exquisite is a hard tumor without feeling, procreate of a naturall melancholick humor, which is in the dregs or grounds of the blood: Or it is a slimie sharp superfluitie, black coloured: sowre tasted. The false or illegitimate Schir doth proceed of an unnaturall melancholie humor, which is ingendered of the most grosse part of the chile, as you have heard the false is altogether without feeling, or hardly may be perceived. There is another sort of Schir ingendred of a phlegmatick, thick, tough matter, and is composed of an humor thick and cold. The Cause is a cold drie humor either of matter melancholique, phlegmatick, or both: for first, when the blood is made in the liver, there is ingendered in it a melancholique humor, which is like unto the lye or dregs of wine, the which afterwards is drawen to the milt for the nouriture thereof: it is engendered, especially by the usage of such meats as are apt for the making of the same, and the milt being weak to draw it, it goeth unto the vaines and there is mingled with the vaines, which by their virtus expultrix doth expell the same by the Hemorrhoides, monthly courses, or varices, and sometime it doth disperse through the skinn, and oftentimes doth breed the Morphea or Lepsie. Sometime it is cast in the most weak parts of the body, and according to the place & quality of the humor, breedeth either Schir or Cancer. If it be cast in any drie part, as ligaments, tendons, or ends of the muscles, on the milt, kidnies, liver, or matrice, it causeth Schir. If it be cast on the soft and glandulous parts, as the pape, emunctoires of the noble parts, face, or privy parts, it maketh Cancer. It may also proceed by the sadnes, suppression of the Hemorrhoides and monethly courses: also by too much applying of cold medicines or tumors, as on Eresipelas or Flegmon, by that means the most subtill doth resolve, and the rest doe become

Definition. Gal. 2. ad glau. cap. 5. Differences.

Gal. 2. ad glau. cap. 9.

Cause. Gal. 14 meth. cap. 3.

Gal. 5 sim. cap. 8

Gal. li 3. meth. cap. 16.

Paul. li. 1. ca. 32.

Signes.

hard. The Signes are these, the tumor is hard and groweth slowly, & of colour livide when it commeth of melancholy, but when of the phlegmatick humor it is white; and being mixed of both humors together, it is of a livide and white colour; unsensible, because of the humor which is thick & drie, closed the conduits of the nerves, so that the animall spirit is in such sort incloſed, that the part hath no feeling. Those which have no feeling are altogether incurable, but such as have any feeling, & being taken in the beginning, in some sort may be helped, those which come to suppuration degenereth easily into Schir.

It closeth the conduits of the nerves *Rovard. lib 1*

Cure.

The Cure consisteth in three things, first, in dyet tending to heat and humiditie, ever abstaining from anger, sadnesse, fear and venerian exercise: The second point doth consist in evacuating the matter antecedent, by purgations, bleeding, provocation of the moneths, and Hemorrhoides: the third point, is to evacuate that which is cõtained in the place, which must be done by things remollients and reselvents, like as Geis-grease, Hens, Cockes: Also Gumm *armoniacke, Stirax, Galbanum*, roots of Althea, Lillies, Camomile, with oyl of Camomile and Lillies; of those you may make lineaments and cataplasmes: also the emplaister of *Diachilon magnum, album, de viro*, with double Mercurie. Galen doth much commend Goates dirt to discusse tumors schirrous. Sometime it happeneth in the tendons, and then we use perfumes thus made. Take the stone called Pyrus, or any other stone being red hot, and quench it in strong vinegar or aquavite, thereafter receive the smoke on the sore part, then apply remolliant remedies: sometime after the perfume, the gumm *armoniacke* dissolved in vinegar, is good being used with good discretion. Those tumors if they augment much with vehement doleur, as often happeneth, I use to apply a cataplasme of Rice sodden in milk, with floure of Beans or Barly, and a little Parts grease, by the usage whereof I have found great help. If this tumor tend to suppuration, you must use no hot remedies to move it much

Gal. 2. ad glau.

Gal Loc. citat.

Gal. 6. tumor contra natu. cap. 6.

much, by reaſon it ingendreth eaſily into Cancer, for remedie whereof have recourſe to the next chap. In ſome parts it may be cut, providing that all be cut & nothing left adherent to the whole parts, neither any portion of the root. For the great flux of blood which ſometime happeneth, you muſt either knit the vaines or ſtay it by actuall Cauters; if it dos not penitrate to the internall parts: but if it doth penitrate it is dangerous, as ſaith Hippocrates; for the which he forbiddeth to ſeek the exquiſits cure of the hidden Cancer. *Gal lib 2. ad Glauc.* *Hip. 6 apb. com. 38.*

CHAPTER XVI.

¶ Of *Cancer*, which the Greekes called *Carſinoma*.

Although that Cancer bee comprehended under the ſchirrous humors, yet there is great difference: for Cancer is a hard tumor, round, unequall, with dolour punction and pulſation: it groweth ſooner than Schir, and hath great vaines about it, tumified and ſwolled, full of melancholick blood, and doth reſiſt being preſt upon. It is ſometime taken for the ſore as a beaſt, and is called Cancer, becauſe it ſticketh faſt to the part as doth the Crabb-fiſh to that which it taketh hold on, as alſo the vaines which are about are like unto Crabs-feet. It is of colour livide or black, hard, and rough, eating, gnawing, and going, like unto the Crabb-fiſh. There are two kinds of it, the ulcerate and unulcerate. The unulcerate, is called the hidden Cancer. The ulcerate, is immobill, not by accident, through the acrimonie of terreſtrious humor. *Paul l. 4. cap 24.* Definition. *Celſ lib 5. ca 28.* *Aetius li. 16. cap 24* Difference.

The Cauſe of it is a dry melancholich humor, not only in the part as Schir, but alſo in the vaines about it, the which in time becommeth ſharp and maligne, and ſo becommeth Cauſe.

Gal. 2 ad glau. Paul. lib. & loco citato.

ulcerate: alſo evill dyet, and uſing of things which breed thick corrupt blood, with ſuch other cauſes, as you have heard in the chap. precedent. Alſo the debility of the vult and parts which it doth poſſeſſe, being deſtitute for the moſt part of naturall heat, and cold of themſelves, as in the paps and other glandulous parts, as under the armes, in the noſe, eares, roof of the mouth, conduits of women, and fundament, feet and hands.

Signes.

Gal tumor. contra nat.

The Signes are dolour, unction, pulſation, chiefly in the night, betwixt nine and four in the morning: in which time I have ſeen the ſick ſo grievouſly tormented with ſuch intollerable paine that it was hard to be endured. The ſore is loathſome to be looked on, pale, ſandy or aſhie coloured, evill ſavoured, by reaſon of the humor which is moſt filthy, ſordide, and ſtinking. It ſeemeth ſoft to look unto, but in touching of it, it is hard, unequall, and cavernous, or hollow: the lippes and borders are tumified and turned over, ever avoyding a virulent matter, like unto the thinn dregges of Claret Wine.

The ſore is evill favoured.

Judgements. *Gal lib 3. meth. cap. 16.*

The Judgements, thoſe in the ſtomack, paps, head, ſhoulders, neck, and under the armes, be all incurable; by reaſon, thoſe parts may not be cut for the great flux of blood that may eaſily enſue of the great vaines and arteries. Of thoſe, ſome are little ulcered, others much ſome recent, and ſome inveterate, in divers parts, ſome are more malignant than others, and for the moſt part are all incurable.

It hath divers denominations.

It hath divers denominations according to the parts it doth occupy. If it happen in the face, it is called by Valleſius, *Ere ſpelas in facie or noli me tangere.* If in the legges or thighs, it is called Lupus: and if in any other part it is called Cancer.

Cure.

The Cure ſhall firſt be in purging of the humor, rectifying, and drawing of blood, provoking of the Hemorrhoides and monethly courſes, if age permit, as alſo by ſtaying the melancholick humor from falling or ſetling on the part, uſing moderate exerciſe, ſpecially before meat, ſleep only ſeven or eight houres, ever holding the belly loſe, with uſing of

of good dyet, which muſt be cold and humid, like as broth of cooling and loſing hearbs. Abſtaine from long faſting, and all things which ingender the melancholick humor, as is amply ſet down by Galen: and all ſuch things as doe heat the blood, like as ſalt fleſh, old Hares, Venſon, Harts, Goates, Vinegar, ſpices, cheeſe, muſtard, fiſh, and ſundry others of like quality; from great travaile, ſadneſſe, anger, melancholie, uſing only one kinde of meat, riſing alwayes from the table with appetite to eat more, uſe ever ſuch meats as breedeth good nourriſhment and blood, like as Mutton, Veal, Capons, and other ſort of fowles, except water fowles, drink Tyſan, Whey, a little Ale or white Wine, that is old, mired with Terriack and Mitridack: alſo decoction of Schine is good. As for topicall remedies, and if it be in fit places, ſome do counſaile to cut it in ſuch ſort that there remain no root nor portion thereof: if ſo be, it muſt be taken in time before the veins bee filled with that humor, otherwiſe it will bee reſidue, as I have often remarked, for the which I will give you two examples. In Paris a Gentlewoman named Madame Burrow in the year of our Lord God 1591. who had a Canker in her thomb, for the which I made amputation in preſence of Maſter Mareſcot and Martin, Doctors of Phyſick, with Leifort, and Peter, Doctors of Chyrurgery, I ſtayed the flux of blood and cured the wound ſon thereafter, which being cloſed, within 8. weeks after it brake out in the ply of her arme, and under her orter, with ſuch malignity and intollerable pain, that notwithſtanding all remedies as well generals as particulars ſhe dyed within ten weeks after. In like manner I had a Gentleman in Glaſcoe under my Cure, in the year of God 1603. called James Campbell, who had a Canker in the ply of his arme, which was cauſed partly by the application of cold venomous remedies, by the which it did grow in ſhort ſpace to ſuch bignes and coroſion, through the acrimonie of that humor, that it did both corrode vaines and arteries, with great flux of blood and other dangerous ſimptomes, for the which

Actius 16. & 45.

Gal. lib. 3. loco ſæpe.

Aduuer. lapi. ce de can. cap.

Gal. ad glau. cap. 11.

Hiſtorie of *Carſinomatous* tumors.

Hiſtorie of *Carſinomatous* tumors.

I did cut off the arme within three inches to the head of the Brachium, and did cure the wound perfectly. But in short time after, it brake out under his arme and in his pap with such intollerable pain, that hee lived scarce three moneths after. These two examples I thought good to set down, that the yong Chyrurgion be not over-rash in promising, before he try the nature of the disease, and the part where it is: as likewise, that all men should eschew the hands of abusers, which most commonly in all diseases doe apply cold venomous things, as was done to this Gentleman: in such cases I have ever used medicaments, refrigeratives, desiccatives, & pacifiers of pain, with such other things, as have the vertue to let the augmenting of the disease, such as the juice of Pa. li 4 cap. 26 Bozall, Iusquiam, Plantane, Lettice, Endiue, Sorrell, Centory, Shepheards purse, wet a cloth in those juices & lay on the sore. Asses milk may be likewise used, as also to be drunk by the sick. I have oftentimes used in this, only the urine of a yong maid-child of 5 or 6 yeers old, wet a cloth therin and apply warm to the sore as the former: by this remedy I preserved a Nun, who had a Canker in her pap the space of 10. yeers. Petrus Hispanus doth counsaile in Cankers of the paps, to apply Goats dung with hony, which he alleged doth kill the Canker: also mans excrements hunt and put in powder, and applyed, doth the like. Divers other remedies may be used for this purpose made of oyl of Roses, Vergie, Serule, burnt lead, Licharge, Pomphollgos, Tuthia, Thuris, Mastick, Camphire, emplaster Diapalma, or Diapompholigos, certain of those mixed together, beaten in a morter of lead, and apply to the sore, doth preserve the same in one estate, also correcteth the acrimony of the humor, the sore were so much the better, if it were sometime washed with water of *Cardus Benedictus*. If you find that those remedies let not the augmenting of it, you must have recourse to the Chap. of Cankers and Ulcers, in the Book of Ulcers; and so I end this Book of Tumors in generall

Milk of an Asse applyed to the sore.

Urine of a maid. *

Goats dung killed the Canker.

Water of *Cardus Benedictus*

The

The fift Book;

Of Tumors in particular.

Which containeth LXXV. *Chapuers, whose Contents be these; By* PETER LOVVE *Scottishman.*

CHAP.

1 Of the excellency of the head.
2 Of the falling of the hair off the head
3 Of the taking away of hair of any part.
4 Of Lyce, Morpions, and Nyts.
5 Of *Pfydracia*, and *Exenthemata*.
6 Of *Tinea* or *Achoris*.
7 Of *Hydrocephale*, and *Physocephale*.
8 Of *Nodus*, and *Gangleon*.
9 Of the excellency of the Eye.
10 Of the composition of the Eye.
11 Of certain maladies of the Eye.
12 Of a regiment for the sight.
13 Of *Lippitudo*, and *Ophtalmia*.
14 Of the weeping Eye.
15 Of the Fistule in the corner of the Eye.
16 Of *Hordelion* or *Pisthia*.
17 Of the haires of the Eye brees.
18 Of *Midriacis*, or *Dilatatio pupillæ*.
19 Of *Suffusio*, or *Cataracta*.
20 Of the cure of *Cataracta*.
21 Of the dolour in the Eares.
22 Of rumors in the Eares.
23 Of Ulcers in the Eares.

CHAP.
24 Of the tumors behind the Eares called *Parotides*.
25 Of the tumors in the nose called *Sarcoma*, *Polypus*, and
26 Of the flux of blood at the Nose. (*Ozena*.
27 Of the lips and their diseases.
28 Of the Hear-shaw or cloven lipp.
29 Of the mouth, tooth, and toothache.
30 Of the corrupt and hollow tooth.
31 To help the mouldy black evill favoured tooth.
32 Of the superfluous flesh at the root of the teeth.
33 Of the pustules and ulcers in the mouth.
34 Of the diseases in the tongue.
35 Of the tumor under the tongue called *Ranunculus*.
36 Of the relaxation of the *Uvia*.
37 Of the tumor of the *Amigdales*.
38 Of the tumor in the throat called *Sciuantie*
39 Of the tumor called *Scrophule* or *Struma*.
40 Of the tumor in the crage called *Bronchocele*.
41 Of the tumor called *Aneurisma*.
42 Of the tumor in the paps.
43 Of the tumor called *Pluriſie*.
44 Of the tumor in the navell called *Exomphalon*.
45 Of the tumor in the belly called *Hydropſie*.
46 Of the fistule in the fundament.
47 Of *Thymus* in the fundament.
48 Of *Condeloma* in the fundament.
49 Of the tumor called *Hemorrhoides*.
50 Of the falling of the inteſtin called *Exitus longæus*.
51 Of the Periton, Pipion, and inteſtines.
52 Of the ſpermatick veſſels.
53 Of the tumor in the Cods.
54 Of *Hernies* in generall.
55 Of the tumor unguinall called *Bubonocele*.
56 Of the Hernie inteſtinall.
57 Of the hernie or ruptour called *Epiplocele*.
58 Of the watry hernie called *Hernia aquoſa*.
59 Of the windy hernie called *Phyſocele*.
60 Of the hernie called *Hernia carnoſa*.
61 Of the hernie called *Hernia varicoſa*.

62 Of

CHAP.

62 Of the hernia humerall.
63 Of the bladder and diſeaſes which happen in it.
64 Of the wand or yard and certain diſeaſes incident to it.
65 Of certain other diſeaſes of the yard.
66 Of the tumor in the liſk called *Bubo*.
67 Of the tumor or pain in the hipp called *Siatica*.
68 Of the tumor or pain in the knees.
69 Of the tumor in the leggs called *Varices*.
70 Of the pain in the legs called *Dracunculus*.
71 Of the tumor called *Elephantiaſis particularis*.
72 Of the tumor in the fingers called *Pannaris*.
73 Of warts in the hands.
74 Of the mulls in the heeles.
75 Of the cornes in the feet, or toes.

CHAPTER I.

¶ Of the excellency of the head.

HAving briefly ſhewed in the former booke of thoſe tumors which generally did proceed of the four humors, with their definition, Cauſe, Signes, and Cure: ſo now I am mindfull to entreat more particularly of tumors, and certain other affections pertaining to Chyrurgery, which happeneth in divers parts of the body, beginning firſt at the head, and ſome ſeverall parts thereof in particular, ſo deſcending to the fingers and toes. The head is eſteemed by the conſent of the moſt learned, to have the firſt place in reſpect of the worthineſſe thereof: for amongſt all the members of man, ſaith the Philoſopher, the head hath the firſt & principall place, for the high and mighty things in it contained. The head hath the firſt place, and why.

Iſidorus

Isiodorus saith, it is called *Caput, a capere*, for all the members do take and borrow from it, being the well-spring or seat of wit, memory, the five externall sences, to wit, Seeing, Hearing, Tasting, Feeling, & Smelling. A tower in it is contained, the life or soule of man, which is thought by Herophilus the Philosopher, to be placed in the lower part of the braines: and Zenocrates in the height of the head. Erasistratus in the two membraines, which the Arabians call Meres Strato betwirt the eyes. Herodotus in the eares. Blemor the Arabike, and Cyreneus the mediciner, in the eyes, by reason that all the passions of the life, is there remarked, as in a mirrour. Some of the Philosophers be of other opinions, like as Aristotle that great interpretor of nature, who thought the heart to be the seat of life, or soul, because it is the seat and well-spring of all the naturall heat, which first liveth, and last dyeth, and is the only storehouse of the vitall spirits, beginner of the vaines and arteries, cheif authour of respiration, & divers more proprieties alleadged by the authour. Yet because that divers Philosophers are of divers opinions concerning this matter, I will not here examine them all particularly, but only shall be contented with the opinion of the most learned, who affirm this *Animus* to have the seat only in the head and braines, in which parts doth shine the most noble effects: all the organs of moving, feeling, memory, imagination, discretion, reason, and divers more are found there: so that we may justly think, like as the heavens are the first principall, whereupon depend all the generations, & alterations elementaries: even so in the head is the first principall of all the actions & motions of our body. Yet notwithstanding, of the worthines thereof and all those benefits in it contained, it is subject to many grievous diseases, but for the present I am not minded to make an exact description of them all, the enterprise were too great, for at least it behoved me to write 200. severall chap. for in it is contained so many severall maladies. I will only for the present, set down briefly certain of those which are most common

Herophilus.

Zenocrates.
Erasistratus.
Meres Strato.
Herodotus.
Blemor
Cyreneus.

Aristotle.

Hermes.

In the head is the first principall of all action.

In it is 200. maladies.

common in their Countries, and that with their severall remedies, by severall Chapters; beginning first at the hair of the head.

Chapter II.

¶ Of the falling of the hair, called by the Latines *Alopetia*.

Alopetia, is a falling of the hair of the head, chinn, and browes, leaving the parts void, sometime with ulceration: to this disease the Fox is much subject called Alopex, for the which it taketh the name Alopetia. The Cause is divers, as in the defect of the aliment, humor, or vapour fuliginous, whereof the hair is engendered and entertained as happeneth to old people: also by some corruption which doth eat away the vapours, or aliment whereof the hair should be nourished and ingendered, like as happeneth in rotten feavers, French-pox, and leprosie. Also by corruption of the whole humors of the body, or by the vice of the pores, being either closed too much, or over lose. Also by the vestiges of old ulcers and sicatrices of wounds, as saith Avicen: also by burning and applying of hot drying salves. Definition. Cause. *Cels. lib. 6 ca. 11* *Gal. 14 therap.*

The Signs, are when we see the haires fall without cause manifest, and little ulcers at the rot thereof, without scales or other superfluitie, it is called Alopetia, and is of divers colours according to the humors infected: as if it proceed of the blood, the colour will be red; if of cholier, the colour will be yellow: if of phlegmon, white: if of melancholie, black or leady coloured. Signes. The colour of the haire according to the humor. *Guid. part 11.*

The Judgements, such as are naturally bald, old people, Eunuchs, and such as lack beards, thisicks, and parts where sicatrices of wounds and ulcers have been, and places being Judgements.

ing rough, rugged, and groweth not redd, bee all incurable. But if the falling of the hair come accidently by the evill disposition of the part or otherwise, and not inveterated but recent, it may be helped: but if it hath bèn of long continuance, either it is impossible or very difficile. The Cure consisteth in generall & particular remedies, as purgations according to the humor which offends, having a speciall regard of the head and blèding if cause require, as at length is set down by the learned Gordionus. The particular remedies shall be first to raise the head, chiefly the empty places, and rub much with rough clothes, using such things as hath the virtue to draw virtue to the part; next make a lavament of the leaves of the vine, and oak trè, doves dunge burnt, woodbine, *Capilli veneris*, Colwort, and Mercurie, sèth all in water, and make a decoction to wash the head often withall: nert ye shall use lineaments, as counsaileth Galen of oyl of *Lauren*, *Petrull*, *Walnuts*, *Aspicke* and *Abrotanum*, also Boars greese, Feres dunge, or vipers, Gerardus for this purpose counsaileth, to take Barley bread and salt burnt together, and mired with Boars greese or hony, and annoint the empti part: for this, approved by *Johannes Baptista porta*, take Bès and burn with Myse dirt and mire with Rose oyl, and anoynt the part, which will cause the hair to grow: or this set down by Nostredamus, take Bès and fry them in an oven or otherwise, till you may reduce them to powder, then mix that powder with hony or Swans blood and annoynt the part. Discorides counsaileth for this purpose to take Euphorb and mire with oyl. Johanne Lebot counsaito distill the excrements of a red haired man and annoynt the part, for this purpose the distilled water of hony is very good: the composition whereof ye will find in my book of the Spanish and French sickness: but forasmuch that oftentimes the hair being growen on empty parts doth become white. For the help whereof Nostredamus approveth greatly divers times to anoint the void parts with the milke of a bitch which impaseth it to grow white.

Cure. *Gal. 19. thera*

Gord part 11.

Galen.

Gerardus.

Baptista porta.

Nostredamus.

Discorides.

Nostredamus.

CHAP-

Chapter III.

¶ To take away hair in any part, and impasse the growing of the same again.

Like as want of hair in places where it ought to grow, as well for health as ornament of our bodies it is also unseemly and evill favoured that hair should grow in places unaccustomed, it maketh great deformitie, and is sometimes painfull, specially in the inner side of the eye-lids. To take away this deformitie, there is sundry remedies set down by *Galen* and divers others, of the which some are dangerous, like as Arsenick, Orpyment, unslaked Lyme, Gravelling, Vitreoll, Coprice, burnt brasse, and divers others of such natures, they not being applyed in little quantity, with other drugs to corrupt their virulency: as for example, I have used this, take three whites of eggs, unquenched lyme 3. unc. Orpyment half an unc. common lie five a little, mixe all together, and let it be of consistence of a soft unguent, annoynt the part, and let it remain half an hour, or in the tender parts a quarter of an hour, then wash it away with hot water: if the hair fall not away at the first, annoynt it a little again and wash it as before, then to refresh the part annoynt it with oyl of Roses or Walnuts, and other remedies which I learned of a Country-man, which I have often used, take Cats dirt well dryed and put in powder, mixed with strong Vinegar, and rub the part with it, and the hair will shortly fall away. Dioscorides counsaileth, first to draw the hair by the root, then take the juice of fumentary, and mixe with a little gumm of Arabick and apply on the part: it doth also impasse the growing of the hair, or this remedy, take half a pound of unquenched lyme, stipped in common lie five, or mans urine, adding thereto half an unc. of Orpyment, seeth all to a thinn consistance like unguent: or this, set

Unseemly hair to grow where it should not.

Galen.

Rondo tract. de facie.

Alexis Pedemontanus.

Gud pa. 11. ſet down by Gordonius, take unſlaked Lyme and Oppymunth, ſeeth them in water till ſuch time that by putting a Gooſe quill in it, the feathers fall away: if in ſeething, it groweth over-thick, add to it a little urine, and annoynt the part, thereafter waſh the place with warm water, then annoynt it with oyl of Walnuts and Roſes.

Chapter IIII.

¶ Of Lice, Morpions, and Nyts, which often doe uſe the skin and roots of the hair.

Definition. These three ſorts of vermin vegetable called Pcheriaſis, or by the Latines *Pediculi*, are ingendered in any part of the body, chiefly in the hot and humide, as the head, privy parts, and the armes, by reaſon of the great quantity of hair and excrements in thoſe parts. The firſt of these kindes is called by the generall name *Pediculi*, or Lyce, becauſe they have many feet, are greater than the others and groweth chiefly in the head, from the which they diſperſe through the whole body. The Morpions, called by the Latines *Peſſalata*, or *Pedicelata*, are found chiefly about the privy parts, and under the armes are not to be ſeen, but where there is hair: they wagg not nor travaile as the Lyce, but doe ſtick faſt to the skinn, and are taken away with difficultie: they corrode the skin, and is called by Ariſtotle *Ferum animall*. The Nyts, called by the Latines *Lendes*, are leaſt of all, and are either found in the head at the roots of the hair, or under the skinn, provoking great itching in the parts. Those three ſorts of vermin, doe greatly moleſt the body, but chiefly the Lyce. Of them enſue a grievous diſeaſe, called by the Latines *Morbus pedicularis*, they iſſue out at all parts of the body, and ought not to be neglected, by reaſon that both holy and prophane

The firſt kind Lyce, and why ſo called.

The ſecond kinde Morpions.

The third kinde Nyts, & where they remain.

prophane Hiſtories maketh mention, that divers being infected therewith, end their dayes miſerable: Like as Herod King of Judea, after he had reigned 37. years, dyed miſerable of vermin. Likewiſe Sylla Dictatour of Rome, a great Captain (in Aſia) ſez the Romaines: he was a man very inſatiable, and dyed likewiſe of vermine. Pherilides the famous Philoſopher and writer of Tragedies, after he had long lived, ended his dayes of the louſie ſickneſſe: there be ſundry others, which were too long to repeat. *Herod.* *Sylla Dictatour.* *Pherilides.*

The Cauſe intern, of theſe three ſorts of vermin, is great corruption of the groſſe humors, which nature cannot altogether digeſt, but ſends to the pores and meats of the true skinn, and there remaineth untill they take life. Of their generation & life taking, I leave it to the learned Phyſitians. They may be ingendered of any of the four humors, as ſaith Gordonius, and are nouriſhed of the juice of the living fleſh: For the which Ariſtole doth ſay, that this *Animall* hath the reſidence in living creatures, and leaveth them ſo ſon as they be dead and diſtitute of life. They are as I have ſaid for the moſt part ingendered of a corrupt humor, as we dos perceive in the louſie ſickneſſe: for then they come forth at the pores of the skinn in ſuch frequency and greatnes, that the pores are open; after the ſame form we ſee the out-camming of drops of ſweat. The Nyts are ingendered of the eggs of the Lyce, as ſayth Ariſtotle. The Morpions are ingendered of a more dry hard humor, half burnt; ſo they are more flat and not ſo tumified as the Lyce. Cauſe. *Gord. part. 11.* *Ariſt 5. de hiſt. animals.* The Nyts are ingendered of the eggs of Lyce.

There is yet a fourth kind called Chytons, they likewiſe take life and corrodes betwixt the fleſh and the skinn, and are ingendered of a more drie matter than the other, and are chiefly found in the hands of idle people: the cauſe externall of theſe animous, is evill regiment of eating and drinking, of ſuch as ingendereth rotten humors, ſurfeiting of fruits, figges, naſtineſſe, idleneſſe, and ſeldome change of cloathes: as I have often times remarked in Armies & Camps, men of good temperature and dyet bered with vermin, negligence The fourth kinde is called Chytons.

in

Arist. 5. histo. animali. 31. in combing of the head is a great cause. Aristotle sayth, that lyce grow in great quantities, by the much usage of waters: for it ingendereth crudities, renders the braines and other parts more humid: yong children are much subject, by reason they have the braines humid. Aristotle sayth, that women are more subject than men, and children more than those of elder age, and those children who hath their hair full of lyce, are lesse subject to the dolour of the head or epilepsie.

Signes. Judgements. The Signes are evident to sight in these parts. The prognostickes, if they doe multiply in great numbers by an internall cause; it signifieth either Morphœa or leprosie to ensue,

Gard. part. 11. by reason the naturall heat is diminished, and cannot digest that evill matter as it ought.

Cure. The Cure is, first to evacuate the body of blood pituit, and other corrupt humors, whereof the vermin is ingendered, which shall be done with pills of *Agaricke, Hierapicra Galeni, Diachath licon, Diaphenicon*; use decoctions inwardly of Garlick and *Calaminth* as counsaileth Avicen. Secondly, in keeping of good regiment of life, abstaining from such things as ingendereth filthy corrupt humors: use things

Change often clean clothes. of good digestion, and that ingendereth good juice, & change often clean cloaths. Thirdly, use the things that have the virtue to dry and cleanse, as baths made of decoction of *Ca-*

Paul. lib 4 cap 3. *laminth, Cyprus, Herba pediculares,* called *Staphysagria alum* and salt, wash the whole body and head therewith, or the head only: if it be alone infected, then use this unguent; take thre unc. of oyl, Wax 5. unc. *Hidrargyron* well extinguished 1. unc. oyl of bitter almonds half an unc. mixe all in a morter and annoynt the head and other parts, save the

Arnold lib 1. cap. 19. suters of the head, or this *Rec. Sem. staphisagria unc 2. helleb. albi. unc. 1. salis 2. dragm. argenti vivi unc. 2. axungia porcina. lib. 1. olei laurini unc. 9. saponis veneti lib. semiss. fiat unguentum,* and annoynt the parts: also the heard *Staphisagria* put in powder and strew the head therewith, or wash it

Gard. part. 11. with the simple decoction thereof: I find it one of the best

Paul. lib. 3. and easiest remedies for this purpose. Paulus doth counsaile onely

only to annoynt the part with oyle and ſtronger vinegar. I uſe with it a little Aloes and finde it good. Gordonius ſaith that the powder of the hearb *Staphiſagria*, deſtroyeth not only vermine on men, but given to fowles, ſlayeth the vermine in them. Lebot counſaileth this, take two ounces of the ſæde of *Staphiſagria*, *Orpimonth* halfe an ounce, oyle of bitter Almonds 4 ounces vinegar and ware as much as wil make it a good conſiſtant of unguent: or this, which may be uſed for young children. take Laurell oyle, and that of Rapberts 2 ounces of each, Pepper and Saffron in powder, of each one a ſcruple, make an unguent thereof. Here you muſt remember that thoſe medicaments which have the virtue againſt Lyce; it is alſo good for Cartaines and Nyts, yet for the Cartaines I have often uſed this, take halfe an ounce of butter well waſhed in Roſe or Calaminth water, quickſilver well extinguiſhed 2 drams, Aloes 1 dram, make an unguent and anoynt the part.

Gordonius.

Lebot. lib 11. of ornament.

The Chyrons which come in the hands or other parts, are cured by waſhing of thoſe parts with ſalt water, or water wherein ſalt fiſh hath been ſodden, or rub them with the juce of Hedder or Henbane, or ſtrong vinegar mixed with a little Aloes. If you would know more diverſity of remedies for the vermine, take advice with Viccarus, Petrus Hiſpanus, Vigo, Alexis and Lebot. There is of thoſe Chyrons or little Lyce found in the membraine conjunctive or white of the eye, which maketh great paine and itching, for the which you muſt very cunningly with a ſtable hand and a ſilver needle, ſuch as we abate the cataract with, pick them out one by one, then waſh the eye with Roſe and Eufrage water.

Chyrons in the membrain of the eye.

Chapter V.

¶ Of the diſeaſe of the head called *Pſydracia* and *Exanthemata*.

Definition. *Adamus Lonitzerus de conſ. veſtitu.*

Thoſe little puſtules or Apoſthumes which poſſeſſe the outward skinn of the head and roots of the hair, are like unto the biting of fleas, or as if one were burnt with hot water, and are of divers colours; ſometime white, otherwhiles red and flat, otherwhiles high ſwelled, pointed, and doloroous, avoyding a corrupt matter, eſpecially being preſt upon, they are ſometimes ulcerated.

Cauſe.

The Cauſe proceedeth of over-great aboundance of groſſe, corrupt, filthie, and vicious humors of the body, the which being converted in vapours, is ſent to the head, the which nature expelleth to the externall parts thereof.

Signes.

The Signes are evident, & may eaſily be diſcerned from thoſe which doe proceed of a maligne infectious humor, as thoſe of the Por, which are evill & more in number, redder and watry, more broad, avoyding a matter virulent, of the which I ſhall ſpeak in their own places.

Cure.

The Cure conſiſteth in generall and particular remedies, as purgations, pilloties to purg the head, made of Aloes, Colocynth, and ſuch like. Uſe fumes, to provoke the head to ſweat: The particular remedies are of divers things, and diverſly compoſed, according to the nature of the humor and puſtules, which is ſometime hot, otherwhiles cold. The ſimples whereof we make our compounds for theſe puſtules, be theſe. Take the leaves of Nuts and Cypres, Lytharge, Ceruſe, Acatia, Galla, Sulphure, Hyraboll, Nutmegs, Nitrum, oyl of Roſe, Vinegar, Water, Wine, Wax, juyce of Wallowes, Barley flower, Pimpernell little roots. Paulus counſaileth for theſe puſtules to take Ruthe, Hony, and Allom, bray all well together and annoynt the part being

Guil. l. de ſalit.

Pa li 3. cap. 3.

firſt

firſt raſed. For the ſame purpoſe, take Lytharge of both ſorts, Ceruſe, of each halfe an ounce, quicke brimſtone two drammes, beat all well and mix with a little ſwines greaſe, and make a lineament. Viaticus approveth much, bitter Almonds well waſhed with warme water, beat them while they come to the conſiſtence of an unguent, and annoynt the part; bitter Almonds alſo bruiſed with little roots and incenſe, and boyled in vinegar, water, or wine, and apply on the ſores. If the puſtules or little ulcers agree not with thoſe remedies, but be rebellious and uneaſie to be cured, in that caſe we touch them with the water of Sublemy. If they be not much inflamed, you may touch them ſoftly with water of ſeparation uſed by the Gold-ſmiths. If you think theſe waters over-ſtrong, mix with them a little Plantin or Roſe water: or this. Take 4 ounces of Roſe water, 2 ounces of Aqua vite, 1 dramm of Sublime, let all ſeeth in a veſſell of glaſſe till the Sublimie be conſumed; and ſo follow out the reſt of the Cure, as you have heard in Ereſipelas.

Viaticus.

Touch them with water of Separation.

Chaper VI.

Of Tinea.

Tinea or Achoris is a malady of the skinn and muſcles of the head accompanied with ſcabs, ſcurffes, ſcalles, ulcers, and falling of the haire, eaſie coloured, fetide, unpleaſant, horrible to the ſight, of the which there are five kinds, as ſaith Guydo: yet Galen doth only allow three kindes, and I am mindfull here to ſpeak of two, which are moſt common: the one is humid and ulcerateth, the other with a dry ſcabb full of ſcalles: of theſe two, the one is eaſie to heal, and familiar to young children, poſſeſſing for the moſt part the head and face, the other is worſe, accompanied with malignitie, inſident to people of elder age.

Definition. Haly Abbas. ſcien. 8 part. 1. doct 2. Guydo. Galen. Paul. l. 3. ca 3.

The cauſe of that which happeneth to young children, is the impuritie of maternall blood they were nouriſhed with

Cauſe.

in the mothers wombe, or by the father, mother, or nurſe, who had the diſeaſe for the time. The cauſe of thoſe in elder age, proceed of evill regiment of life, a corrupt ſalt pituit or murion of a corrupt, groſſe, bilious, melancholick humor, or by haunting ſuch as be infected, for it is contagious.

Signes. The Signes you have heard in the deſcription, beſides that ſometime it is virulent, ſanious, corroding the ſkinn full of little holes, like thoſe which the moths make in cloth, and is called by the Latines *Ulcera capitis manantia*. Sometime it is drie, accompanied with groſſe thick ſcabbe, by reaſon of the vehemency of the corruption and aduſtion of the humor.

Judgements. The Judgements, in young ones it is eaſie to heal, and ſuch ſtrong remedies ought not to be uſed as to thoſe of elder age: this, with all other ſcabbs of the head and face that happeneth to young children, with that purulent rotten humor which iſſueth at the eares, doth deliver them from Epilepſie, and divers other great maladies, ſo better oftentimes to have patience and let nature worke, than to be over-curious in the cure.

The Judgements of the elder people, if it be recent, it is ſomwhat difficile to cure, and is called *Tinea quaſi tediioſa & fortiter tenans*, and being inveterate it muſt have a long time great travile, very difficil to helpe, and almoſt incurable: or if it cure, it leaveth the veſtige and weakeneth the part with emptineſſe of haire.

Cure. The cure in young children ſhall be, firſt in preſcribing a diet to the Nurſe, which may be done by the adviſe of the skillfull Phyſitian, next uſe this unguent, take the juice of Fumentary, with a little Centory, Scabious, Annula Campana, of each 3 ounces, Lytharge 2 ounces, mire them with 4 ounces of Swines greaſe, oyle of Walnuts and Ware a ſufficient quantitie, and make an unguent: or this which I have often times uſed, take Turpentine and waſh in common water, thereafter in fumentary water, freſh butter waſhed in roſe water 2 ounces, ſalt halfe an ounce, two yolkes

Unguent for Tinea.

Gald part. 11.

of

of eggs, juice of Lymons and oyl of roſe, of each 1. ounce, Camphier half a ſcrup. of thoſe you ſhall make an unguent and anoynt the head. You ſhall finde divers other remedies for this purpoſe, ſet down in my book of the deliverance of women, and diſeaſes incident to young children.

the Authors Booke of womens delivery & childrens diseases.

The cure of thoſe in elder age & inveterate: firſt evacuate the humor which provoketh the diſeaſe, next raiſe the head, every week once waſh it with a lixive made of finders of the vine tree of Gravelen, in the which ſhall be ſodden Cephalick hearbs, and ſome ſope, and waſh the head therewith, after the which deſiccatories were good to be uſed.

The Cure of elder people.

The common people uſe only for this purpoſe ſtrong urine, which is not good: For as Galen ſaith, it is of a ſaltiſh quality; ſuch as are skilful in this cure, do firſt raiſe the head, and pluck out the haires by the root, with a bonnet made only of pitch. Lebot counſaileth to take flower of clean rie half a pound ſteeped in vinegar, next take half a pound of pitch put in powder, melt all on a ſoaking fire, and work all together, thereof make your bonnet which not only pulls out the hair, but alſo the evill humor, that being done, you ſhall uſe *unguentum enulatum cum duplici mercurio*, and annoynt the head, avoyding allwayes the ſuters and openings of the head, for the mercurie is hurtfull for the braines. Or you may uſe this, approved by Ambroſe Parrie; take *unguentum enulatum*, with double Mercurie, Egiptiack, of each 3. unc. Uitriol Roman in powder, 1. dramm incorporate all together, make an unguent, and annoynt the head.

Strong urine is not good.

cauſtic

Parae.

Petrus Hiſpanus counſaileth to raiſe the hair and waſh the head with ſtrong vinegar and urine, then take the root of *Enula campana*, tender branches and leaves of the figg tree, bitter Almonds, bruiſe all with oyl & ſtrong vinegar, and unto it the aſhes of the roots of grèn cole, Coliwort, Lytharge, Hydrargiron, Seruſe, Salt, ſeeth and bruiſe all together and apply unto the head.

Petrus Hiſpanus.

Gordonius doth approve for this purpoſe, if it be rebellious and inveterateth, as alſo for all other infections of the

Gord. part. 11.

skinne, as leprosie, *malum mortuum*, *Morphea*, and such like, this unguent, take the two Elebors, quicke brimstone, Vitriol, [illegible], finders of Gravelie, of each one halfe an ounce, make all in a powder: thereafter take the juice of Bozage, Scabious, Fumitarie, and Paritary, of each 3. ounces, let all seath with the grounds of strong vinegar and old wine, on a soaking fire, till the juices be consumed, thereafter put unto the powder, with the decoction with half an ounce of liquide pitch, make all one consistence of unguent. Some use for this purpose *unguentum marceatum*, *agrippa*, *aragon*, *de althea* adding to them the 12. part of *Hydrargiron* and anoynt the head, save only the suters. The malady called *Favus* or *Chyrion*, is little different from this either in Cause or Cure, except the holes are larger, and casteth a matter more like unto hony, for the which it taketh the name.

Powder for Tinea.

Chapter VII

Of *Hydrocephale*, and *Physocephale*.

Definition. *Albuc. lib. 2. cap. 1.*

HYdrocephale, is a watry serous filthy blood, or humor, which doth occupie the whole head or some part thereof, especially in yong children: and Physocephale is a windie humor, which doth the like. These tumors are either contained betwixt the pericran and skinn, betwixt the muscles, betwixt the pericran and cran, or betwixt the cranium and members, which cover the braines called *dura* and *pia mater*, but the tumor in that case is not so great.

Cause. *Adamus Lonicerus de cons. valetud.*

The Cause is either externall, or internall. The internall, cometh from the matrice and by the mothers milke, which is too serous and watry, and such like food as breed watry humors. The externall cause cometh of cold presently, after the birth, also through the unskilfulnes of midwives, as

I have sometimes remarked, who did draw and presse the childs head so much, at the time and after the delivery, that the veins and arteries did break, not being as yet strong, so the blood did shade and spread through the rest of the head, and so degendereth into water. *Paulus cap. 3. Aetius lib. 6. cap. 1.*

The signes are great tumors, with deformity of the head, the eyes and face swelleth, as doth appear in hydropick. Signes.

The judgements are, such as be within the cran are incurable: those that are betwixt the cran and pericran, or betwixt the pericran and muscles, may be cured but hardly. It groweth often times to such greatnes that the child dyeth. Judgement.

As for the curation of such as are cureable, they are partly healed by dyet, and using of drying things, abstain from things humid, as you have heard in Oedema. Also by externall remedies applyed to the part, that hath any drying vertue, with some friction: also to comfort the head, which shall be done by fomentations, lineaments, unguents, and such like, made of Calaminth, Origan, Betone Cammomill, Melilot, Anthoes, and red Roses: Also you may make lotives of the ashes of the Vine tree, thereafter shave the head, and apply this emplaister following. *Rec. olibani unc. 1. sarcocolli dragm. 1. gummi arabici seminis raphani & anethi an. 1. unc. dimid. olei de spica parum, cera quantum sufficit fat emplastrum:* Or this, take Pony half a pound, Origan, an handfull and half, common salt half an ounce, mire all in form of a Cataplasm and apply hot to the head. Or this, which I have sometimes used; take shell Snails and bruise them shells and all, and apply them to the head in form of a plaster, so let it remain while it fall away of it self, for it doth mightily resolve: If by those means you profit not, the humor being in great aboundance, you must make incision in divers forms, according to the part and humor therein contained, but in such sort that the humor and water flow not all at once, but by little & little, of over-great evacuation commonly done, great accidents and sometimes death ensueth, chiefly in young children: so it shall be best you make your Cure. Emplaister for Hydrocephale. Make the evacuation by degrees.

evacuation by degrées, and cure the wound as you have heard in Oedema. If the cran or membraines are offended, ye must use incision and perforation of the cran, then evacuate the humor and heale the wound, as in others. In the meane while purge the Nurse, use good regiment, and such as hath the virtue to dry, purge the head and hold the belly lowse. There is another kinde of this called *Macrocephale*, which is a supernaturall greatnes of the pan, flesh, and muscles, and not properly Tumor; it receiveth no curation, it is seldome seene one of this sort. I did see in Paris in the yeare of God 1583. to the greatnesse of a pot, which would containe 12 English pints.

Macrocephale, what

Chapter VIII.

¶ Of the tumor called *Nodus* or *Gangleon*, which commeth in the head.

Definition. *Cels. li. 7. ca. 6*

Those tumors which happen commonly in the head, are sometimes hard, other whiles soft, commonly round, & doe happen for the most part in dry nervous parts of the body, but chiefly on the head and joynts, hands, and feet, ridge back, wrests of the feet and hands, other joynts, and parts empty of flesh.

Cause.

The cause, are stroakes and wearinesse of the joynts, veins, and tendons, either by extention, contortion, stroake, or hurt; also by the humor which floweth to the part, and can neither digest nor turn to good substance as it ought, but degendereth in a cold grosse thick humor, amongst the substance of the sehnes and tendons, cheifly in the articles and such other parts, as you have heard in Atheorema: as also the Signes.

Paul. lib. 4. ca. pen.

The

The Cure conſiſteth firſt in good dyet, eſchewing all meats which ingender groſſe humors, uſing things of good digeſtion, and abſtain from drinking of water, purge, and bloud, haunt no humid places: as for the particular remedies, this humor is ſometime incloſed in a membrain, and in that caſe proceed to the Cure, as you have heard in Atheorema. Sometime it is neither incloſed in a bag nor cheſt, and then we apply a thinn cake of lead, rubbed with quick-ſilver, which hath great virtue to reſolve, or an emplaſter reſolative made of *Galbanum*, *ammoniacke*, oyl of Lillies and Bayes, Brimſtone and Vitreoll *Romanum cined.* Alſo the emplaſter of Vigo, *Diachilum magnum* &c, ſi *duplici mercurio* and apply it. Or this, *Rec. emplaſt. i. oxicrocei, unc. 1. mucilaginis, althæa, lini & Phænugræci ſing. dragm. 6. Euphorb, ſagap, ammoni, ſing. dragm. 3. diſſolvantur gummi in aceto, fiat emplaſtrum.* At the firſt it is good to rub it with faſting ſpittle while it grow red: if it be mobile and ſmall cragged, it may be knit with thread or ſilk ſomewhat faſt, drawing it faſter every day, ſo it cutteth the ſooner but the better: if it be dipped in *aqua ſublimata* and dryeth before the applying, ſo it will fall of it ſelf.

Cure.

It is incloſed in a bagg.

Avicen.

Orib. li. 7. ſect.

Rub it with faſting ſpittle.

The reſt of the Cure is eaſie, by thoſe means you may take away warts in any part: if it neither reſolve nor open of it ſelf, we open it with a launce or Cauter, produceth the fall of the Eſchar, and conſumeth the cheſt or bag with Egyptiack, powder of Mercury, and ſuch like, cleanſe the wound and cicatrize it.

In thoſe ſorts of tumors, divers matter is oftentimes found, like as in Atheorema and Steotema: there is ſome of thoſe tumors, that you would think them Carcinomators. I remember once in Paris being called with the famous and learned mediciner D. Blackwood, to the reverend Father John Beton Arch-biſhop of Glaſgow, who had one of thoſe tumors on the ridge of his back about the ferd or firſt vertebie, to the greatnes of a mans fiſt: it was extream hard and dolorous, and ſo great at the rot that it could not be knit.

Doct. *Blackwood.* Arch-biſhop of *Glaſgow.*

I applyed all remedies to resolve and mature, but nothing availeth, so I was enforced to open it with a Cauter, where I found in it contained a matter like cut stones, grēn coals, but small quantitie of liquid substance. I did evacuate the humor with suppuratives and detersives, with grosse tents every day applyed twice, with this remedie, Terebinthin well washed in Aqua-vite, with a little hony of Roses mired together: so cleansed the ulcer, consumed the bagge, corrected superfluous flesh with powder of Allom and Mercurie, and cicatrice the wound, and so the noble man recovereth his health, to his great contentment.

Powder to correct the superfluous flesh.

There are in the head tumors of the same nature, such as *testudo* and *talpa*, which sometime are without ulcer and corruption of the bone, and in that case are cured as the former: sometime they are with corruption of the bone *cranium*, and in that case the humor must be evacuated and the exfoliation of the bone procured, as ye shall hear in the chapter of ulcers, with corruption of the bone: as for divers other diseases of the head, have your recourse to Hernius.

Chapter IX.

¶ Of they Eye, the proper instrument of the sight, and most noble of all the externall senses.

Amongst all the Senses, that of the sight hath bēn esteemed by the common consent of all the Philosophers, to be the most noble, perfect, and admirable: the excellency whereof is shewed to us many wayes, like as by the diversitie of the objects which it representeth, and by the operations which are spirituall: also by the particular object which is the

the ſight, the which ſight cauſeth us to know more diverſitie and difference of things, then any other ſenſe: So Ariſtotle doth call it Senſe, becauſe by it all brave Sciences were invented. It is compoſed with ſuch excellency & good parts, that Plautin and Syneſius doe call Nature a Magician, for having put in ſuch a little part ſo many good graces. Orphe calleth them the mirrour of nature. Alexander the Peripatick, calleth them the windowes of the ſoul, for by them is remarked all our paſſions, as love, enuie, ſadneſſe, fear, hardneſſe, pittie, revenge, deſpaire, hope, health, ſickneſſe, life and death. Blemor and Cyren Phyſitiners, were of opinion that the ſoul was placed in the eye, for in them thou ſeeſt as in a mirrour all that is placed and hid within them, and is given to guide and draw us to the knowledge of God in beholding his marvailous workes, as alſo to be guiders to the whole body, and to contemplate high things, and are admoniſhed of the place to which they ought to look, according to that which David ſaith, I lift mine eyes to thee that dwelleſt in the Heavens. Virgo writeth, that the eyes of a dead Virgin hath great virtue againſt enchantments and charmes. Hippocrates commandeth us, when we firſt viſite the ſicke, to caſt our eye on the eye of the ſick, where ſhall be ſeene the ſtrength or weakneſſe of the animall faculties: if the eye be cléere and bright, there is good hope: if obſcure and tenebrous, it doth prognoſticate death. Likewiſe the excellency of it is knowne in the certitude of the actions, for no doubt it is the ſence moſt aſſured, whereof commeth the olde proverb, that one witneſſe which hath ſeen, is better then ten which only heard.

Ariſt. Metaph.

Plautin. Syneſius. Orphe. Alex. Peripat.

Blemor. Cyren.

They are guiders to the whole body.

Pſal. 123.

The Philoſopher Thales ſaith, there is as much difference betwixt ſeeing and hearing, as betwixt truth and falſhood Anaxagoras eſteemed ſo of that part, that he thought we were only born to ſee. Galen Prince of Phyſicke, doth call it a divine member, which nature hath placed in a hollow place, for which it is called by the Latines *Oculus*: it is ſo placed, that it ſhould not be expoſed to the hazard of a million of injuries,

Thales. Anaxagoras.

Galen.

juries. They are fortified about with foure hard bones, for their better protection & decoration, as also to apeare more beautifull above them is the forehead, underneath the chaft-blade, on every side the angles or corners with the eye-lidds called by the Latines *celia a celare*, to cover & guard the eye, as saith Isiodorus. In case they should be altered with over-great light: they have likewise muscles to give voluntary movement with sundry other parts, as you shall heare at length.

Isio. li. 10. ca 1.

Now seing the excellency of the eye is of so great importance and profit unto us, the skilfull Chyrurgion ought to take great care & diligence for the conservation of the same, especially to know the temperature and composition of it: the nature of each part thereof, with their functions and offices, to what use they serve; to the end he may use fit remedies for each party diseased, seing it is holden for a *maxime* in medicine, that one cannot know what commeth contrary to nature in any part, except he will know first the nature of each part and things belonging thereto.

Chapter X.

¶ Of the description and Composition of the Eye.

Barthe de proprietat. rerum.

The eye which maketh man to see, is called of the Greeks *Ophthalmos*: it is placed in the highest part, to make us contemplate high things and discerne a farre off, also to serve for a watch-man and guide, that nothing hurt us. It is of forme round or pyramidall in the inside, which forme is most capable and most easie to move. It is of soft substance and double usage, the one common to all creatures to guide them, the other serveth onely for man, and maketh him

him to know God by viſible things: they be two in number, to the effect if one be toucht or hurt, the other may ſerve, as alſo maketh the ſight more perfect to ſee divers objects at once. The temperature is cold and weak; it is very ſenſible, by reaſon of the great ſimpathy it hath with the brains: it is of ſundry colours, which either proceedeth of the humor *Tunick Uvia*, or of the ſpirits: it hath ſeven muſcles to make it move and keep firm. The moſt part of the Anatomiſts find only ſix, which take their beginning at the circle *Orbita*, in the which the eye is placed; the firſt, is ſcituated above the eye, to lift it ſtraight upward; the ſecond, is ſcituated beneath, and pulleth it downward; the third, is ſcituated in the great corner of the eye, and turneth it towards the noſe: the fourth, is ſcituated in the little corner or canthus of the eye, and turneth it towards the eare or temple, and having accompliſhed their actions, pulleth it inward. The actions of the other two muſcles which are obliques, is to turn the eye, not fully, but in half circle. The firſt, is ſcituated in the upper part of the eye and the great corner, by a membrain, and draweth the eye towards the noſe; the other is ſcituated underneath, and turneth the eye towards the eares. As concerning the tunicks or membrains of the eye, there is diverſitie of opinions amongſt the Anatomiſts. Hippocrates remarketh only four, Galen five, whoſe opinion Gulmio and Petrus Franco hath followed, and learnedly have written of the eye. Some late Anatomiſts doe make nine. Andreas de Laran, who is the moſt excellent Anatomiſt that hath written, doth remark ſix. The uſe of them is to involve and containe the thin humors together in their own place. The firſt of them is called *Adnata* or white of the eye, it is ſtrong; covereth the reſt, hath his beginning in the pericran, and endeth in the circle *Iris*, which is of ſundry colours. The ſecond membrain is called *Cornea*, becauſe it is hard, cleer and ſtrong, like the horn of a lanthorn, and hath the beginning from the *dura mater*. It containeth the humor, and maketh the eye round, and ſerveth for a lanthorn

The temperature of the Eye, cold and weak.

Gal lib. 10. de uſu part.

Hippocrates. Galen. Gulmio. Petrus Franco.

thyne to the criſtalline eye. The third is called *Uvea*, and is like the skinn of a vine berrie or grape being preſſed: it hath the beginning from *Pia mater*, which is the ſecond skinn that covereth the braines: it covereth all the eye, except only within, where it is placed in a little round hole, called the pupill or windy of the eye. It is of ſundry colours; without, it is black; within, blew and green: it is ſoft, & preſerveth the criſtalline humor from the hardnes of *Cornea* and doth rejoyce the criſtalline with the diverſitie of his colours. It retaineth the ſpirits that they doe not diſſipate, nourisheth the *Cornea* and humors of the eye, for the which nature hath implanted it full of vains and arteries. The fourth is called *Aracnoides*, it is very white and delicate, like unto the thinn ſtriffen of an ynzorn or Spiders webb: it doth involve the criſtalline humor immediately, & defendeth it. The fift is called *Reteformis*, it is interlaced with innumerable little threads like a net, & commeth from the marrow of the nerve Optick as ſaith Loran. His office is to bring the animall ſpirit to the criſtalline, report all the viſible things to the nerve Optick, & carrieth the nourishment to the humor *Vitrei*. The ſixt and laſt is called *Vitrei*, becauſe it containeth and involveth the humor *Vitrei*, within theſe tunicks is contained the three humors. The firſt is called *Aqueus*, for the ſimilitude it hath with water; or like the white of an egg both in colour and ſubſtance, it is incloſed betwixt the humor criſtalline & membrain *Cornea*, partly to impaſſe the great heate that might happen unto the criſtalline humor, as alſo to defend the criſtalline from the hardnes of the membraine. The ſecond and chiefe principall inſtrument of the light is called criſtalline, & in Latine *Glacialis*, it is white and cleer like Criſtall glaſſe, mervoy ſolide, of figure round, ſome what preſſed before and behind, ſo is more firme and ſure, for being altogether round, it moveth over-eaſie, & is not ſo ſtable: it is ſituated in the midſt of the eye upon the humor *Vitrei*, and before it is the humor *Aqueus*: it is involved in the own proper membrain called

It is of ſundry colours.

Three humors of the eye.

The firſt humor & uſage.

The ſecond humor and uſage.

called *Arnoid*, not known by our ancients. The third and last humor is called *Vitreus*, because both in colour and substance it is like to melted glass: the use of it is to prepare the aliment to the cristalline humor, and make the blood white, for if it were nourished with pure blood, it would be somewhat red in colour, it defends the cristalline from the hardnes of the membraines, and retaineth the spirits. The eye is likewise endued with two pair of Nerves. The first of them is called *Opsasis* in the Greek, and *Visio* in the Latine, which bringeth the spirit animall e interior sight to the cristalline: the nerves Opticks is thought by the old Arabians, to have their originall from the interior ventricle of the brains, and by the Greeks from the middest of the lower part of the brains, the which the most part of all our Anatomists doe hold. Andreas de Loran approveth them to have their beginning from the posterior part of the brains, where the little and mickle brains doe meet called *Cerebrum* and *Cerebellum* which opinion is most true, as I have seen in the School of the Chyrurgions in Paris by Master Soveran Pino Doctor of Chyrurgerie, where he did evidently demonstrate every eye to have one of those nerves pertaining to it: yet both differ from other nerves, because they be more soft, full of holes and perosities, not cave, as thought Galen and Herophilus.

The Third humor & usage.

Whence their originall is.

Master Soveran *Pinio.*

Those nerves and perosities doe serve to carry the visuall spirit to the eye from the brains, but before they come to the eyes, they be gathered together like the yron of a Mill, making one only body, whereby the spirits and sight is carryed conjunctly to the middest of the cristalline humor, which maketh one eye being closed, we see as perfectly as with both. After this conjunction they do divide, and each of them passe through the holes of the head, and is severally implanted in either eye, and in the exterior part of the nerve which is soft, and marrowish, doth dilate it self, and maketh the tunica reticular. The exterior part of the nerve endeth his course in the membrain *Cornea* and *Uvea*.

Why wee see as well with one eye, as both.

The

Two pair of Nerves.

The second paire of nerves are least, and goe to the muscles of the eyes, to each eye one, and causeth them to move, and sendeth little small threds to every muscle. This paire hath his beginning and ending with the former. The eye hath likewise divers little vaines and arteirs, which bringeth nourishment and life to it, they proceed from the branches of the Jugulars and Carotides. The eye hath also a fatnesse which goeth about it and holdeth it humid, and defendeth it from the cold, retaineth the natural heat, which is the cause that it becometh not cold. The eye hath also three kirnels or glands, one above, another underneath, and the third in the great corner of the eye: The first two hold it moist and weake, and are like unto water sponges, receiving the humor which commeth from the braines, that it fal not in over great abundance on the eye, from those glands proceedeth the teares when we weepe either for joy, sorrow, weaknesse, or rubbing of the eyes, as doe women when they would appeare to weepe for any cause. The third which is in the graat corner of the eye, stayeth the excrements which come to fall on the eye, so that those who have those glands consumed, doe continually weepe, as you shall heare in the Chapter of *Ophthalmon.*

Fatnesse of the Eye.

From the glands proceed the teares.

Chapter XI.

¶ A briefe rehersall of such common maladies as befall the whol Eye.

Having in the former Chapter, briefly shewed the description and composition of the eye, so I shall now set down such common diseases as usually doe happen in the whole eye, and every severall part thereof, beginning first at such maladies as are common to the whole eye, which are divided

divided into Similars, and Organicks: The Similars are in the temperature weak and dry, hot and cold, either with matter or without: The Organicks consist in the evil confirmation, as greatnes, littlenes or in scituation, as when the Eye is over-great, and is called the Ox-Eye, which being cast out from the circle, is not so quick, nor the motion so prompt, by reason the spirits are dissipate, it is called *ex Ophthalmia* or *oculi promanentes* in latine: the greatnes doth happen by the vice of the first confirmation, or by accident, as by tumor of inflamation, or great defluxion: The littlenes of the Eye called *atrophia* or *macies oculi* cometh by nature, and is called the pigs Eye, or pinching Eye: it cometh also by accident, as by dissipation of the naturall heat, caused either by dolor, continual fever, great wayling, weeping, and defluxions, so that the Eye is weakned and cannot draw the nourishment, and so becometh atrofied and extenuate; Or in scituation, as when it is out of the own place, which may happen by cause extern, as saith Avicen, like as strokes, falls, violent coughing, vomiting, blowing, and such like: Or by cause intern, like as great fluxion which loseth all the muscles of the Eye; Or by inflamation or solution of continuity, as when the Eye is burst, called in Greek *Raxis*, and by the Latines *Ruptio*: also by the confusion and mixion of the whole humors together. These be the maladies which occupie the whole Eye. As for *Nictalopia*, *Niopiasis*, and *Amblopia*, they are not maladies of the Eye, as some think, but only simptomes of the spirits and humors. As for the particular diseases of the Eye, they differ according to the parts, as humors, tunicks, nerves, muscles: so first I shall begin at humors, as the most noble part of the Eye, the which method is followed by Galen. The humor cristalline may suffer all sorts of diseases, but the most common is the intemperature dry, or when it goeth out of the own place; the dry temperature is caused by the withering & drying of the Cristallin called *Glaucoma*, and becometh all white. Hippocrates saith this happeth oftnest to old people, and is for

Similar parts.

Organick parts

In scituation.

Lib. de simpt. causis.

Glaucoma.
Hip. 3 aphor.

Symptomes of the christaline Humor.

the most part incurable. The Cristaline goeth divers wayes out of the owns place, as to either side, high, low, over-far down or over eminent: if it be over-far in, the person seeth nærer hand,; if over-far out, he seeth not far off; if it turneth to either side, all the objects doe appear sidewayes; if it goe up or down, all the objects will appear double: of those some are curable, and some are not: some proceed of cause interne, or by inheritance, and some be contagious, as saith Avicen. The humor *Aqueus* is sometimes over-much dryed up, as chanceth often in suffusions and depriving the sight wholly: if it be much diminished in quantity, the Cristaline humor becometh dry, the *Uvea* becometh withered, and the *Cornea* abashed: As for the humor *Vitreo*, our ancients have not remembred any particular diseases, yet it is thought by some late Writers, that it may indure the like diseases as the humor *Aqueus*. As concerning the membraines of the Eye, there is but three of them. In which particular diseases are observed, to wit, the conjunctive or white of the Eye, *Cornea*, and *Uvea*; the conjunctive suffers three sorts of maladies, to wit, *Ophthalmia*, whereof I shall speak in the proper Chapter, *Ungula* and Contusion. *Ungula* is called *Pterigium*, which is a nervous flesh, that beginneth in the great corner of the Eye, and extendeth to the pupill, it is like the nayl of a mans hand, and happeneth after Ophthalmica evill cured; it is accompanied with pourit teares and redneſſe, which impaſſeth the sight Of this disease there are three kinds, Membraine, Panniculous, and Adipus, some have it of inheritance, others by accident, when others whole; it is contagious, as saith Avicen, and goeth from one Eye to another, for the help whereof Ætius doth counsell to consume it by corrasives: other old Writers are of opinion to cure it with a needle and thred, after the form as you shall hear in the Chapter of Fistula, intreating of *Carnis lachrimalium*. The third and last Malady of the conjunctive is Contusion, which is called *Epoſiphagma*, and is said by Paulus and Ætius to be a rupture

Simptomes of the humor *Vitreo*

Maladies of the three membraines of the Eye.

a rupture of the veins of the eye, which maketh the blood to disperse through the conjunctive or white of the eye, representing all the objects red, and proceed either of cause extern, as falls, strokes; or of cause intern as when the vains are repleat with a tenuus blood. The *Cornea* hath divers maladies, as Pustules, Ulcers, Cankers, Cicatrices, and Ruptures; the Pustules are black little blobbes called by the Arabs *Bothor* and doe proceed of one subtill watrie or bilious humor, of the which some are superficiall, others profound, some of whitish colour, others black: of those sorts of ulcers, there are Seaven kindes counted by the Greeks and Arabians, of the which three be Interne, and Four extern. The ulcers Cankerous are ingendered of a humor atrabiler accompanyed with dolour. The cicatrice is a maladie of the *Cornea*, which maketh it white, it taketh away the light and colour. Rupture, is a breaking of the *Cornea* which ever proceeds of causes extern, *Uvea* wherein is the hole called Prunall or *Uvide* of the eye, is subject to a particular disease called the dissent, which commeth when *Cornea* is broken. The Prunall hath three sorts of diseases, to wit, *Tabes*, *Suffusio*, and *Dilatio*. *Tabes*, is that which is called by the Greeks *Phthysis* which is an extenuation of the prunall, and is either naturall or accidentall: The naturall is proper for the sight: the accidentall is ever hurtfull, for the which you must give good order to the cause, and in the mean time, foment the eyes with a spunge wet in pap milk or Euphrage water that is warm. If the eye be growen great through over great nutriture or abounadance of the humors of the head, or any particular affection, remove the cause by purging, bleeding, & good regiment: thereafter apply to the eye Saffron and oyle mixed together, foment the eye with *Aqua Marina*, or with water and salt: as for *Suffusio*, and *Dilatio*, yee shall hear in their own place. The muscles of the eye are subject to three principall maladies, to wit, *Distortio*, shaking, or great moving and immobility. *Distortio*, is called *Strabismus* or *Illesis* by Hippocra-

Plin. lib. 3.

The diseases of *Cornea*.

Ulcers Cankerous.

The diseases of prunall.

The maladies of the muscles.

tes, and proceeds by the resolution of some muscle, and causeth the eye to move in divers fashions, in such sort that nothing is seen but the white of the eye. The shaking or moving of the eye is called *Hippos*, which is a defect in the muscles, which are so weakened that they cannot contain the eye. The immobilitie, called by Hippocrates *Pixis*, happeneth when the muscles have wholly tought their action of moving, or by the obstruction of the nerve Optick, which bringeth the movement. The Maladies of the nerve Optick is Obstruction, Compression, Paralisie, and Ruption.

Obstruction. The Obstruction proceedeth sodainly of a cold thick humor, which doth stop the nerve Optick.

Compression. The Compression commeth by strokes, or when the nerve is shrunk by dryneſſe.

Paralisie. The Paralisie proceeds of a thin serous humor, which softeneth & loseth the nerve, representing all the objects double, as sometime happeneth to people that are drunken.

Ruption. The Ruption, is when the nerve is broken or dilacerate, which commeth by strokes, and maketh that the visible spirit cannot passe. All the diseases of the nerve optick make a common simptome, which is called by the Arabians *Gutta serena*; which is as saith Ætius a blindneſſe without hurt, apparance, or mark in the eye. Those be the principall maladies which doe occupie the eye, for the which you shall hear principall Rules in the next Chapter following for the conservation of the same, with a briefe rehearsall of such things as are profitable and hurtfull, in generall: with the cure of such particulars as are most common in this Country. But, as for every particular disease of the eye, eye-lids, and corners of the eye; because they be more than an hundred in number, so not meet in this place to make a description thereof, because that divers approved authors have written of the most part of them, both Greekes, Arabians, Latines, and others, whose help I have used in this worke: so I doubt not but that the skilfull Chyrurgion will take advice with them in that matter.

More than a 100. diseases in the Eye.

CHAP.

Chapter XII.

¶ Which containeth a Regiment very exquiſite for the conſervation of the ſight, with ſuch things as are profitable, or hurtfull for the ſame.

Such people who have their ſight either diminiſhed or grown weak, ſhall finde in this Chapter a ſhort regiment, with ſuch remedies as hath bẽn written either by Greeks, Hebrews, Arabians, or Latines, for the conſervation of the ſame: which regiment ſhall partly conſiſt in good Dyet, Pharmacy, and Chyrurgerie.

The form of Dyet hath bẽn thought by our ancients the moſt noble part of all, in ſo much as it is a familiar friend to nature, being rightly uſed, and neither doth alter nor trouble the ſame in any ſort. This Dyet conſiſteth not only in eating and drinking, as thinketh the common ſort: but alſo in the adminiſtratiõ of the ſix things, which the medicíners doe call Unnaturalls; like as, the Ayre, Meat, Drink, Sleeping, Waking, Motion, Reſt, Evacuation, Repletion, with the Paſſions and Perturbations of the minde.

The Ayre which is the firſt, hath a mighty power in altering and changing our bodies; it paſſeth directly by the noſe to the brains, by the mouth to the heart, by the paſſages of the heart and movement of the arteries, through the whole body. It doth furnith nourithment to the ſpirits in ſuch ſort, that Hippocrates ſaith, of the conſtitution of the ayre depẽdeth the good and evill diſpoſition of our humors and ſpirits. The ayre muſt neither be over-cold, hot, nor humid, but clear, declining to moderate heat, and drineſſe, taking alwayes heed of the ardent heat of the Sun, and raynes of the Mon, and for the Cyrring, which is the dew that falleth after the evening: Alſo from cold, moiſtie, and rainie weather:

ther: good dry dwelling is meteſt, and if it may not be had, the chamber where the diſeaſed ſhall remain, muſt be helped with good fires and perfumes, as did the old Arabians, of leaves of Euphrage, Fennel, Pergeline, of each one ounce, Aloes one dram, Incenſe three drams, mire all together and make one perfume.

The South and North winds are enemies to the eyes. 3. Sect. Aph.

As concerning the windes, the South and Nerth windes are enemies to the eye, as ſaith Hippocrates. The ayre which cometh from ditch waters, moſſes and rotten carrions are evill, fire, reeke, duſt, and blowing of Alchimie; for the which, ſuch as have their eyes weak ſhould not blow at Alchimie in ſeeking out the Philoſophers ſtone, in caſe they loſe both their eyes and purſe alſo. Over great light is alſe noyſome, as you ſhall hear in the chapter of Ophthalmia.

Colours.

As concerning the colours, ſome are hurtfull, others not: the white colour diſſipateth the ſpirits in drawing to it, and the black rendreth the ſpirits more groſſe: as for blew, violet and green, they rejoyce the ſight amongſt the which, the ſaphier and emerod are profitable.

The ſecond point conſiſteth in eating and drinking, the ſick muſt abſtain from all groſſe, viſcous, vaporous, ſalty, windy, ſweet and pricking things that are full of excrements, taking heed to eat leſſe at night than at noon. As touching bread and fleſh, they muſt be ſuch (and ſo prepared) as you have heard in the ſecond Chapter of the ſecond Book. Eggs new layd and ſoft, taken with powder of Sugar, Cannall, and Euphrage, clariſie the ſight; but being fryed are noyſome. Vergis, Vinegar, and juice of Limonds may be uſed, Saffron, Cannell, Ginger, Pepper, Nutmegs, Hony, and oyle of Olive, are not hurtfull; all baked meat, milk, and all that commeth of it, is evill. As touching hearbs, ſome are approved for the ſight, as Sage, Pergeline, Betonie, Roſemarie, Mint, Pimpernell, buds of Aſperge, Eye-bright, Succorie, Parſly, Carret roots, and Capers. The Arabians recommend Navets, and Turnips greatly, if there be mixed with them Finkell, and Annats, becauſe they are windy.

Soft roſted eggs are good.

Baked meat is not good.

windy. The hearbes which are hurtfull and forbidden, are Lettice, Anethe, Baſilick, Purpie, Poꝛthie, Cabbage, Colwoꝛt, Garlicke, Onyons, Beets, Spinage, Sybows, Radiſh, Parſnips, Olives, with all raw fruits, which are hurtfull to the ſight, by reaſon of their great humidity, boyled Prunes may be uſed, oꝛ roſted Peares are very good being taken with the pouder of Eyebright: it impaſſeth the fume to goe to the head, Finkell, oꝛ Anats, Comfits, Cotinack, Figges and Raiſons may be uſed, and thus much concerning eating.

In drink there are two things to be conſidered, the quality, and quantity. As foꝛ the quality, the great Mediciner Achigenes ſaith, in all maladies of the eyes much drink is hurtfull. And as touching the quantity, Ariſtotle in his Problemes ſayth, that thoſe that drink water have their ſight very ſubtill: Yet Raſis and Avicen condemne the uſage of water, which opinion is agreeable to companions that rather would loſe their eyes than want wine: Such as may not paſſe without wine, may uſe a ſmall clean wine not ſharp noꝛ vapoꝛous, that is mixed with water of Eyebright and Fennell: In the uſage of it, take the flowers of Boꝛage and Pimpernell, and put into a glaſſe, when you drink, the colours reioyceth the ſight, and the hearbs by their vertue rebates the fume of the wine: ſweet and new wine is fumous, and ſtrong wine lyeth long on the ſtomack, ſendeth vapours to the brains. There may be an artificiall wine, made foꝛ ſuch as are diſeaſed of their eyes, made of Eyebright, which is much commended by thoſe who have written of the Eye, eſpecially Arnoldus de villa nova, who affirmeth to have healed an old man who had bin a long time blind, only by uſing that wine a whole yeer, called *Vinum Euphragiatum*, which is made by putting a quantity of the hearb in new wine, let it remain untill the wine grow cleer and ready to drink, and uſe it. As foꝛ other compoſitions of Eyebright with the mighty effects of it, are ſet down at length by the ſayd Arnold in his book *de Vino*.

Two things to be obſerved in the drink. *Archigenes. Ariſto. Probl. Raſis, Avicen.*

Eyebright. *Arnold. lib. de vino.*

Arnol. de vino.

This herb is of temperature hot and dry, and may be put in the diſeaſed his ordinary drinking wine, as I have ſayd of Pimpernell and Borage: and ſuch as deſire not wine, may uſe Hydromell compoſed of this, take 15 pound of Fountain water, 1 pound of fine hony, mix all in one pot, adding thereto a little Fennell & meaſes, of Eye-bright an handfull, tye all together with a thread and put in the pot, and let it ſeeth till the third part of the water be conſumed: in ſeething be ever taking away the ſcum of the hony. The Eye-bright may be uſed in Beer or Ale, being put in when it beginneth to work, and let it remain untill it have left working.

Compoſition of *Hydromell*.

As for Sleeping, Waking, Exerciſe, Repletion, Evacuation, with the Perturbations of the mind; I have ſpoken at length in the ſecond Book of this work. As concerning the ſecond part, it conſiſteth in ordaining of remedies; for aſmuch as the weakneſſe of the ſight cometh either by evill temperature of the brains, or evill diſpoſition of the eye; therefore the expert Chyrurgion ſhould ever have regard to thoſe two parts. If the brains be over humid, they muſt be dryed; and the eye weak, comforted.

Plato. Plato doth admoniſh us in one of his Dialogues, that we never dry up the brains, neither fortifie the eye by externall remedies, except the head be firſt purged: and becauſe it is uneaſie to purge the head, except the whole body that ſends the excrements be firſt purged, which muſt bee done with ſuch remedies as have the vertue to evacuate the whole body generally, having always ſome propriety with the eye.

Hip. lib. de vſu

Pilles for the head.

For this purpoſe the old Arabians recommended the pilles of *Agaricke*, *Lucis maiores* and *minores*. Or this, take three drammes of Aloes, waſhed in Fennell or Eye-bright water, Euphrage 3 drams, Agarick 1 dramme and an half, Rubarb 1 dram, the bark of Mirabolans, Citrins, rubbed in oyl of ſweet almonds 4 ſcrupl. Cynic well beaten 1 dram, Maſtick, Ginger, and Cannell, of each 1 ſcrupl. the Troſſickes of Alliandan 5 gra. mallar all theſe with

Alhandal

ſuper

juice of Fennell and ſirup of Stecas, of the which you ſhall make a maſſe, and take a dram thereof every fourth night once: ſuch as may not uſe the pilles, may uſe this ſirup Magiſtrall, take Fennell 1 ounce, leaves, of Eye-bright, Betonie, Fumentarie, Mercury, Succory, Germander, and Verben, of each one pugill, Raiſons and Prunes, of each one a duzen, Fennell ſeed, and Annel-ſeeds 2 drams, Sage, Stecas, Cuphrage, Roſemarie, of each one pugill, let all ſeeth in clean water, in the expreſſion add unto it 3 unc. of Cynie, and let it infuſe warm in that decoction a certain ſpace, with the expreſſion of one ounce of Agarick, of Cloves one dram, or in ſtead thereof as much Cannall, let all ſeeth with a quantity of Sugar, to the conſiſtance of a ſirup, aromatiſed with half a dram of Nutmegs, and as much of powder of *Diarrhodon*: if you would add half an ounce of Rubarbe, it were ſo much the better. Of this ſirup you may take every fourth night once, either with a little broth or decoction: capitall Glyſters alſo much commended for divers diſeaſes of the head and eyes. Decoction ſudoriphick, which ſhall be made of *Salſa parila* skin, with Eye-bright and Fennell ſeed. It is very much commended for the conſuming of the great humiditie of the brains. Sirup magiſtrall. Glyſters.

The body being ſo purged by univerſall remedies, the brains may be evacuated by the noſe and mouth, which are conduits ordinary conſtituted by nature to that uſe. The earings drawеth the humor to the eye, which is the part diſeaſed. If there be great deflurion on the eyes, you may put in your noſe a ſpice of that bone which is found in the heart of an Ore, it hath the vertue to ſtay the fluxion: or you may apply on the forehead a cataplaſme made of Bean flower, ſodden in water and Vinegar. Earings. To ſtay the fluxion of the Eyes.

Hippocrates ordaineth deflurions of the eyes, to be diverted by the mouth. For this purpoſe take Raiſons, and wet them with a drop of the ſpirit of Fennell, and chew in the mouth, or rubb the roof of the mouth with the eſſence of Fennell; It will draw down the humor that way: Sage, 6. *Epid. ſect.* 2.

Maſticatories.

or Peritar to chew in the morning, were very good. The Maſticatories are more to be approved than the Carings for ſundry reſpects. These things being done, you ſhall uſe conſerves that have the vertue to fortifie the ſight: take the conſerve made of the flowers of Euphrage, Betonie, and Roſe-marie, of each one ounce, Teracke 2 drams, conſerve of Roſes, half an ounce, pouder of Diazodum 1 dram and a half, Paſtes 2 ſcrupl. Make an Opiat with ſirup of the conſerve of Cytrons, take a little of it each morning at your riſing. After your meat you ſhall uſe a pouder digeſtive made of Coriander, Fennell, red Roſes, Coral, Peril, Euphrage, and Sugar roſat, put all in fine pouder, and uſe of it a little after meat. There be alſo certain externall remedies which are uſed for the clarifying of the ſight, of divers ſorts and diverſly compoſed; but here I ſhall content me with ſome few which I have oftentimes uſed. You ſhall waſh your eyes everie morning with this diſtilled water, Take the crops of Fennell, Ruth, Euphrage, Verven, Comentill Betonie, Roſes, Pimpernell, Agrimonie, Carbell, Iſope, and Selydon, of each one a handfull, ſhear all ſmall and infuſe them in white wine for the firſt time; next in the water of a young boy that is in good health, the third time in womans milk: laſt of all in fine honie diſtilled, as in a Lymbeck, and keep it in a cloſe glaſſe, and put it every morning (and at certain other times) in your eyes: you may alſo waſh your eyes with white wine, wherein hath ben ſodden Fennell, Eye-bright, Selydon, and a little Myrabolans: or this, Take a pound and a half of white wine, as much Roſewater, Tuthea, as much, Peaſes half an unc. put all in a well ſtopped glaſſe, and ſet it in the ſun the ſpace of twenty daies, remove it every day once and uſe it for your eies. Unguents are much commended, amongſt the which this is moſt ſoveraigne, take two ounces of Swines greaſe that is very recent, keep it in Roſewater ſix houres, then waſh it twelve times in white wine, thereafter add to it an ounce of Tuthea that is well prepared & put in pouder, one

Conſerves for the ſight.

Diſtilled water for the Eyes.

Unguent for the Eyes.

ſcrupl:

ſcruple of the ſtone Hematites well waſhed, Aloes waſhed and put in powder twelve gra. Pearles three gra. incorporate all with a little water of Fennell, and make an unguent thereof, of the which you ſhall put a little in the corners of your eye, There be divers colours and powders which may be uſed, in the which I have not found ſuch ſucceſſe, as in waters. As for Chyrurgerie, which is the third point, it conſiſteth chiefly in applying & uſing the former remedies with bleeding, cunning vontoſing, applying of cenſurs or bloud-ſuckers, cauters, frictions, bathe, and ſuch like, as you ſhall hear at length in the eight Book following. Theſe be the means by the which the ſight may generally be conſerved.

Ariſtotle inſtructing Alexander

Chapter XIII.

Of the tumor in the Eye, called *Ophthalmia* by the Grecians, and *Lippitudo* by the Latines.

HAving in the four precedent Chapters ſpoken of the Eye, and the diſeaſes which are generally incident thereunto, with a briefe regiment for the conſervation of the ſight: So now I ſhall intreat of ſome few diſeaſes in particular, which I have found the people in this Country moſt ſubject unto, beginning at *Ophthalmia*, which is an inflamation of the whole Eye, but chiefly of the membrain called Conjunctive, with great redneſſe and dolour. The cauſe is either internall or externall; the externall are ſtrokes, heat, duſt, winde, great cold, rubbing moths in the Eye. The internall cauſe, is defluxion of humors, as alſo the veins externall and internall of the head being repleat, whereof proceedeth great fluxion; alſo the ſanguine, cholerick,

Definition. *Paul. l. 3. ca. 22*

Cauſe.

terick, phlegmatick humor which aſcendeth to the head.

Signes. The Signes are manifeſt, like as great inflamation, redneſſe, heat of the Eyes, and temples, dolour, repletion of the vains, hardneſſe.

The degrees thereof. This ſickneſſe hath four degrees, like as other tumors, and happeneth often to young children and others who have weak Eyes, which is the cauſe that they are ſubject to fluxion of humors.

Judgements. The Judgements are; the matter is ſometime hot, otherwhiles cold, and thoſe which happen in Winter are worſe than in Sommer, if they be neglected, and evill handled, there inſueth often evill accidents, as ſpottes, rupture of the *Cornea*, and divers others; if the dolour be vehement, it is dangerous in fear of corruption, and corroſion of the *Cornea*.

Gord. li. citato

Cure. As for the Cure, there are three things to be obſerved, the firſt is good dyet, eating little, and chiefly at night, abſtain from all vaporous things and of evill digeſtion, ſuch as fiſh, fruits, ſpices, ſalt, and humid things. Abide neither in great darkneſſe, nor in too much light; great light diſſipateth the ſpirits, and ſometime cauſeth blindneſſe, as I read of the ſouldiers of Zenophon, who by going long in the ſnow, became almoſt blind. Alſo Dionitus the tyrant of Sicill made his priſoners blind after this ſort: firſt he impriſoned them in a very dark place, then brought them ſuddenly unto great light, ſo made them all blind. Make not much, and abſtain from the great paſſions and perturbations of the minde, from ſmoak, from duſt, and blowing of Alchamie, for it hurteth the Eye, and conſumeth the ſubſtance, and maketh men miſerable both in bodie and goods; hold up thy head, abſtain from wine, women, and ſuch like, as you may perceive by theſe Verſes of the learned Gordonius.

Great light cauſeth blindneſſe.

Aetius ſerm. 7. cap. 3.

Gordonius.

Hæc oculis multum, ſol, pulvis, fumus, & æſtus
Venus, cum fletu, vina, Veneſq; nocent.
Aëria ne mandas, nec quæ ſunt plena vaporum.
Nec capas, lentes, allia, pira, fabas.

Moreover,

Moreover, you must abstain from all Narcoticks except in violent dolours. The second intention consisteth in evacuating and everting the humors by pilles, glisters, bleeding of the vain Cephalick, ventosing on the shoulders, frictions on the thighes, legges, and extremities, opening the vains and arteries of the temples. The third intention is in topicall remedies, as colours of divers sorts, according to the diversitie of the degree and time of the Apostumes; as in the beginning of the inflamation, take Plantane water, and Rose water, of each half an ounce, two whites of Egges, a little Fennell water and womans milk, the mussilages of Psilion with a little trosistes of Rasis *sine opio*. a little Camphire, put of those in the Eye: Also water of Ruth, Uervin, Roses, and Celidon, and apply it often to the Eye; at night make a Cataplasme of a rosted Apple wrought with womans milk, and a little Rose water, put it betwixt two peeces of linnen cloth, and apply it to the Eye, or this remedie which I have often proved, not only in Ophthalmia, but also in divers other maladies of the Eyes, take two ounces of white Wine, as much Rose water, Euphrage half a crown weight, of Tuthia prepare as much, Aloes a little, three or four leaves of mastic, put all in a vial and stopp it close, set it three weekes in the Sunne, and instill thereof in the Eyes, in the mean time use implasters in the temples of masticke *de bolo et contra rupturam*, and suchlike, to stay the fluxion: for the great dolour, the blood of a pigeon, turtle, or hen, under the wings, and instill it in the Eye, also milk with the yolk of an egge and a little rose oyle, may be likewise applyed. Likewise for the dolour of the Eye Chalmeteus counsaileth to take a rosted apple, yolk of an egge, rose water and womans milk implaite in form of Cataplasme, also a peece of white bread the thickenesse of half an inch and breadth of twelve-pence steeped in rose water, and papp milk, and apply betwixt two peeces of cloth to the Eye.

Hip. 2. Aph.

Topicall remedies.

a collyrium to dry in the eye

Cataplasm for the Eyes. *Celsus lib.*

the Authors medicine.

Jesus lib 3. de oculis.

Paul. lib. 3. ca Chalmeteus.

CHAP.

Chapter XIIII.

¶ Of the weeping Eye, called by the Latines *Fluxus oculi*, or *Delachrimatio*.

Definition. *Opthalmon* is a continuall flowing and falling down of a thin watry humor on the Eyes which sometimes

Cause. is hot, other times cold, it causeth abundance of watry humors in the head, chiefly such as have very great heads. Also by fever applying of sharp medicaments in the Eye, also great weaknesse of the vertue retentrix and concoctrix,

Signes. or by some stroke in the kernell of the Eye; The Signes are evident to the sight, like as redneſſe about the kernell of the Eye, with great heat: which sheweth that the defluxion commeth from the vains of the Pericran. The Judge-

Judgements. ments, it happeth to some by nature from their childhood, which hardly may be stayed, it is almost ever painfull, with inflamation and bleer-eydneſſe, and is for the most part incurable, especially those who have great heads or have gotten streakes with losse of substance of the kernell

Cure. of the Eye. The Cure consisteth first, in good regiment and using of things of good digestion, that hath a dryed vertue, abstaining from such things as ingender humidi-

Mesues de egritud. oculorum. tie and vapors: evacuate the body with purgations, and pilles. If there be plenitude, let blood the arme of the syde, also the vains and arteries of the temples, as shall

Albuc lib 2. cap. 4. & 5. be thought expedient: Next use frictions of the head and shoulders downward application of cauters and cetons to divert the humor, with an emplaster on the temples, that hath the vertue to compell the humor to fall down, made thus, *Rec. sanguis draconis, boli armenici, masticis, ax. unc.*

Petrus Fran. corde Harnem. 1. *misceantur cum albumine ovi et aceto, fiat linamentum*, which you shall apply on the temples. Also the astringent plaster set down in the generall Chapter of wounds, intreating of the future incarnative, with this oyl written by Petrus France, *Rec, cerussi abluti, farcocolla nutrita, a-*

cacia.

catiæ, lieci libani, an. drag. 2. margaritarium dragm. ſemiſ ſuccimali punici accoſti dimidiæ quantum ſufficit fiat collyrium. which you ſhall uſe morning and evening. Raſis doth counſell is the continuall ſtare of the kirnel of the eye the patient to bath every morning faſting, and to apply this powder in the Eye, thus made, *Rec. tuthiæ dragm. 10. coralli rubri mirabolani citrini fricati, aloes an. dragm. 2. piperis darg. ſemi. fiat ex his pulvis* which you ſhall put often in the Eye: by the uſing of this powder and the bath, Raſis doth teſtifie to have cured many.

Powder for the Eye. *Raſis Morb. ocul. lib. 1.*

Chapter XV.

Of the Fiſtula in the corner of the Eye, called *Ægilops* in Greek, and *Fiſtula Lachrymalis* in Latine.

Egylops is a little tubercle or apoſthume called by the Arabians *Garab*, it doth occupy the great corner of the Eye towards the noſe, which being opened, there iſſueth out a thin virulent humor or matter: it being over-long in opening or negligently handled, becometh fiſtulous in the fleſh with corruption in the bone. The cauſe is evill humors from the whole body, chiefly from the head, which not being haſtily matured, acquireth a putrifaction, and bitterneſſe, which doth corrode both fleſh and bone, and maketh a cavety wherein is contained a matter ſometime like unto milk, ſlimie, glutinous or water, ſometime of mid-way conſiſtance, which iſſueth either at the corner of the Eye without, or at the noſe within. The ſignes are evident to the ſight, bering and paining the Eye continually with inflamation, redneſſe, and alteration of the bone, which may be known by the ſound, by the which you may perceive an aſpiration or haroneſſe. It is ſometime of a canckrous angry nature, and dangerous to be deall with in fear of haſtie death. The prognoſticks, all thoſe Fiſtules are difficile to cure, both for the nerves to the eye,

Definition. *Celſ. li. 7. ca. 7.*

Cauſe.

Signes.

Iesus lib. de oculis.

eye, as alſo the fleſh being conſumed maketh a continuall weeping in ſuch ſort, that hardly can the ulcer conſolidate, but cauſeth the bone to corrupt and putrifie, for the which the moſt part of all fiſtules in the eye are incurable, except only by uſing of the Canter actual, as I have often ſeen. The cure

Cure.

is firſt to purge the body if it be repleat, either of humor or blood: The humors muſt be cured by fit medecines, and the blood evacuated by the cephalick vain of that ſide the fiſtule is on. As for topicall remedies, I am not of opinion with ſome of our ancients, who did approve the uſe of repercuſſives, I counſel rather reſolatives and maturatives,

Vval. li. 2. ca 8.

making the overture ſo ſpædily as may be; next cleanſe the wound with ſome mundificative that is gentle, and waſh it every day with decoction of Celydon, Ruth & Vervin, with a little hony: alſo for this purpoſe you may uſe claret or white wine with hony, waſh the wound and dry it gently. The

Enchylops.

which method may be alſo uſed in *Enchylops*, which is an Apoſthume in the great corner of the eye: As for the cauſe, ſignes, and cure of it, they differ little from the other: If the

Rol. li. 1. ca 38.

fiſtule be with corruption of the bone, you ſhall firſt dilate gently the wound or ulcer to the ground, till ſuch time as you perceive the bone diſcovered, which ſhall be done with tents of Caddiſh, Genſian, or Spunges prepared and wet in

A collyrium

Hony, thereafter uſe this collir which is aſtringent and drying, ſet down by Raſis thus,

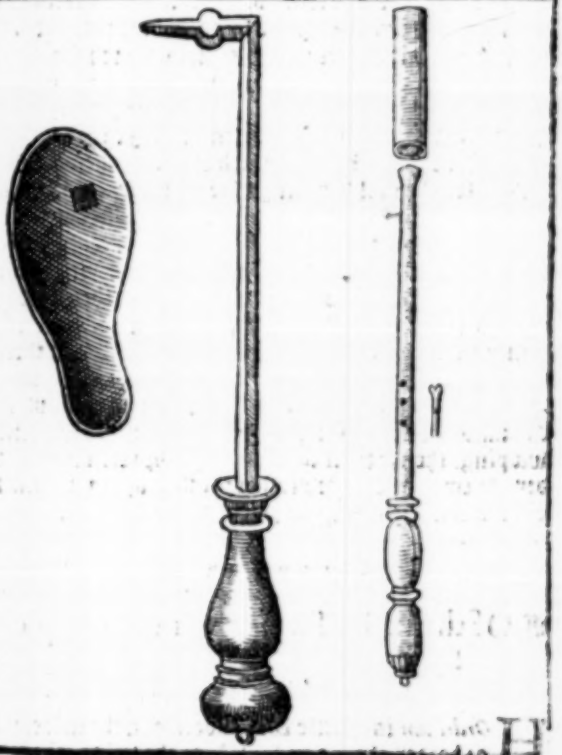
Raſis moh. parti. li. 19.

Rec. Aloes, Thuris an. drag. 1. ſarcocollæ, ſanguis draconis, balauſtiæ, antimonii crudi, albuminis ov. drag. 1 1. ſem. aruginis quartam partem unius drag. miſceantur cum aqua euphragia fiat collyrium. The which you ſhall inſtill every morning three or four drops in the eye; thereafter let the patient lye two or three hours on the whol ſide, preſſe out the matter every morning before you waſh the Ulcer, and dry it well before you apply the collir, and ſo continue this form till ſuch time as by paſſing it, there iſſue no more matter. By this means the ſaid Raſis affirmeth to have cured many. Gordonius ſets down a potion which hath a mighty vertue for ſuch Puſtules: If by theſe means you

pre-

profit not as yée would, yée muſt dilate the wound as yée haue heard, and apply an actuall Cautor purpoſely made, according to the proportion of the wound and corrupt bone. *Albuc. li. 2. cap. 19.*

Cautors actuals for the fiſtula in the eye.



Beware in using the Cauter you touch no other part. After the Cauter pressed, apply oyl of Roses, Rose water, Plantine, or solatum, beaten with the white of an egg: let the patient lye with his head well high, then procure the fall of the scarre and corrupt bone, with fresh butter or common digestive made of Terrebintin well washed, oyl of Eggs, and a little Saffron, which you may use while all be well mundified, and the corrupt bone exfoliat; thereafter fill up the wound & consolidate the same as other wounds. There

Albuc. lib. 2. cap. 17. is another kind of excrescence of flesh, which happeth in the great corner of the eye, called in Greek *Encanthis*, and by Arcen *additio carnis lachrymalium*. which is an addition of

Cause. flesh to that which groweth naturally. It proceedeth either of a melancholick humor, much blood, or when the flesh groweth after the evil handling of some ulcers, which hath preceded, or by the remanent of a cataract which hath been left on beaten down: There are two kinds of it, the one is tender, red coloured, which may be helped by drying medicines, as is at length set down by Æginus: The other kind is more

Adamus Lenicerius de cons. valetud. Cure. malitious, it groweth greater, and is taken away after this form: first, there must be a needle with a strong thread past through the midest of it, then lift it up and cut it with a sharp

Celf. li. 7. cap. 7. Albuc. lib. 2. cap. 16. shear or bistezie, taking alwaies good heed you cut none of the naturall flesh; for if so be, it will procure a continuall weeping; then after it is so cut, apply dry encolires and powders to impaish the growing of the flesh again: then follow

Hip. li. de visu. out the rest of the cure, as you have heard in *fistula lachrymal.*

Chapter XVI.

¶ Of the little Tumor which occupieth the Eye-lid, called *Pisthia* in Greek, and *Hordelum* in Latine.

Definition. *Hordelium* is a little hard tubercle in the uttermost part or border of the eye-lid where the hair doth grow; it is of

of form like a Barley corn, whereof it taketh the name. In vulgar language the Staying; it cometh to maturation slowly; it is oftentimes contained in a little membrain as bagg, like a Hydatis. If it be of long continuance, it groweth to such hardnesse, that scarcely it doth receive any cure. As for the Cure, Galen, Musa, and others counsail resolutives to be used, I have found nothing better then to open it with a bistorie or launcet, as counsaileth Paulus, Celsus, and Ætius, evacuate the humor, cleanse the sore with yolks of egges and honey; thereafter a little of the colyre set down by Rasis in the chapt. precedent, till it be whole. Sometime this tumor happeneth within the eye-lid, and is more round and mobile than the other. It is called *Grando* by the Latins; in the vulgar language, the Haillstone. In curing whereof turn over the eye-lidd, make incision, and cure it as the former.

Staying

Cure. *Galen. Musa. Celsus.*

Chapter XVII.

Of the haire which groweth in the inward side of the Eye-brees.

Those superfluous hairs that molest and prick the inward side and borders of the eye-lidds, which are noysome to the eye, making it continually to water, it is called by the Greeks *Trichiasis*, and *oculorum a Pilis infusio* in Latine. The cause proceedeth of a quantitie of superfluous humiditie from the head. The cure, as counsaileth Rasis, is to pluck out those hairs by the root, either with some instrument, emplaister of Mastick, or otherwise, whereof you will finde infinite receits of the old Writers. The hair being plucked out, you shall annoynt the part with the heap of a Frog, or scrapings of iron sodden in Vinegar, as counsayeth

Definition.

Cause. *Jesus li. de ocul.*

Cure. *Rasis moth. part. li. 6. ca. 19.*

Gor. tract. 3. leth Gordon. I have often used for this purpose Crocus Martis, sodden in strong Vinegar and annoynted the part.

Alexis li. de secretis. Or this set down by Alexis of Pimunth, for a rare secret, and learned by him of a noble Lady in Syria, which is excellent for the taking away of haires in any part; Take a piece of

Mes. de oculo cum aegritud. pure gold that is small and round like a ring, somewhat crowned at the point, heat it hot in the fire, then rub the inward side of the eye-lidd gently where the haires doe grow, thereafter annoynt the part with oyl of Roses and Violets; if need be, the next day doe the like; and if they yet continue,

Rasis loco cita. doe the like, the gold maketh that no cicatrice remain. Rasis doth counsail the usage of an hot pyon or needle, and apply

Cels. li 7. ca. 7. Avicen. as the former. If after this they yet grow, you shall use this liniment set down by Avicen; which is made of Jusquean, Opium, and Psilium, seeth them in strong Vinegar, with Seruce of vines, and lead, of each a like quantity: incorporate all with a little Allom, and water of Jusquean, annoynt the

Gord part. 3. part. Gordon counsaileth only the Jusquean, Mandragour, and Opium. For this purpose some doe commend Opium, Mussilagis of Psilium, Seruce, Lead, Litharge, powder of Margaritis, with a few of those little worms that doe shine in the night, and annoynt the part therewith. Or this lineLiniment for haires. ment, which I have sometime used, Take the juice of Jusquean, Sanguis draconis, Cumm Arabick, and Incense, of each six drams, Rozall water a little, incorporate all and make a liniment, and annoynt the part therewith.

Chapter XVIII.

¶ Of the enlarging of the pupill of the Eye, called *Mydriacus*, and *Dilatatio Pupilla* in Latine.

Definition. *Paul. li. 3. cap. 22.* MYdriacis is a dilating or enlarging of the pupill or apple of the eye, which happeneth when the membrane Uvea

Uvea is enlarged at the hole or window of the eye, and doth repreſent the obiects more great, confuſed, and unperfect, than they ought. The ſignes, the ſick looketh fair up with the eye in the own colour; ſometime the pupill appeareth to be changed out of the own place, called by Arnoldus, Pupillæ è loco remotio. The dilatation happeneth ſometime by the vice of the firſt confirmation, and ſæth reaſonable well; but being much dilated, it is incurable. The cauſe of this diſeaſe, is either internall or externall: The interns are the humors which by little and little floweth from the head, and cauſe the Uvea to dilate, whereupon enſueth the dilatation of the pupil. it happeneth often after long diſeaſes of the head, and in ſo much as may be, is helped by dyet and purgations. This happeneth often to yong children after long ſickneſſes, who are only cured by ſimple remedies, cloſe keping from cold and great light. The cauſe extern cometh of ſtrokes or falls. The cure conſiſteth much in good dyet, abſtaning from all things that doe provoke and carry vapours to the head, and hurt the eye. Alſo purgations and bleding in the armes and corners of the eye, frictions and ventoſing of the ſhoulders with ſcarrification, nert inſtill in the eye the blood of a Chicken or Pidgeon, taken out of the vein under the wing. Raſis doth counſail to take the gall of a Bird or Crane and inſtill in the eye; which opinion Avicen holdeth, adding to thoſe galls Saffron, juyce of Lymons, Armoniack, Horny, and Fennell water; thereafter uſe this plaſter to comfort, made of Bean-meal, Althea, Cammomill ſodden in Claret wine and water: Or a fomentation made of red Roſes, Myrtles, Cammomill, and Pelilot, of each one handfull, ſæth them in a little wine and Roſe water, foment the eye with ſponges.

Signes.

Arnoldus.

Cauſe.

Judgements.

Feſin filius haly lib. 2. de oculis.

Cure.

Blood of a Pidgeon or Hen. *Raſis lib. 9. morb. parti.*

Chapter XIX.

¶ Of the web in the Eye, called *Suffusio Cataracta* and *Hypochyma*.

De nomine.

Suffusio is a maladie called by the greeks *Hypochyma*; and by the Arabians *aqua* and *gutta*; in english, the Cataract or Ey, which is an abstruction of the p*u*pill, by a gathering together of a thick hardned or congealed humor betwixt the membrain *Cornea* and humor Christalline, directly upon the p*u*pill empaſhing the ſight. There is diverſitie of opinions amongſt the ancients, concerning this maladie.

Holy Abbas
Azaranias.
Avicen.
Mezues.
Albucaſis.

Holy Abbas, and Azaranias ſay, that this humor is gathered betwixt *Uvea* and Christalline, Avicen, Mezues, and Albucaſis, doe eſteem it to be and remain betwixt the *cornea* and *uvea*. I am of opinion, that it may remain in all that ſpace betwixt the *cornea* and Christalline, and doth mix it ſelf with the humor aqueus. The cauſe is, partly as you have heard, in the definition; partly ſtrokes, and falls.

Cauſe.

Paul. li. 6 ca 21

Paulus Ægineta ſaith, that the cauſe antecedent, proceedeth of coldnes and imbecilitie of the viſuall ſpirits, ſpecially in old people, and ſuch as have long ſickenes and vehement hot fevers, ſometime by great vomiting, or traveling and journying: It may alſo proceed of vapours which aſcend from the ſtomack, either by the indigeſtion, repletion of evil humors, or vapors which aſcend from the ſtomack. This humor is ſent from the brains by the veins and nerves to the part, or ingendereth in the part it ſelf by the weaknes of the facultie Concoctrix and Expultrix. The Signes when it beginneth, the ſick doth imagine to ſee before his Eyes little things like flies or moats, like the duſt of the ſunne, threads of wool, haires, ſpiders webs, or as it were a circle about a candle when it is lighted, thinking one candle to be two.

Gal. loc. affect 3. cap. 1.

Raſis lib. 9
Ætius ſerm 7. cap. 31.
Avicen tertia trac. cap 19.

Judgements.

The judgements, ſome are curable, others not thoſe which be curable are of the colour of ruſty Iron, or white, tending

to

to the colour of pearles, or of an ashie or grœne colour, like a turkisse or sea-water. All these be good and fit to be couched being ripe, which you shall know thus; first streake the whole Eye of the sick, then rub the lid of the sore Eye gently with your finger or thumb, turning it gently sometime to one side, sometime to another, but beware in over-much rubbing, for that troubleth the eye. Then opning it suddenly if you perceive the Cataract spread large and suddenly goe round together as before, it is a token that it may be abated: those which are incurable and not to be touched, are of the colour of lead or chalke; Cytrons black or yellow, they be all evil; receive no curation. The Cataract doth oftentimes take the colour of that humor it is made of, that, which after it be rubbed, doth spread and goes not together againe, but with great difficulty, hardly doth receive any cure: that which cometh by strokes, falls, great sickness & head-ach, are all incurable, and in those cases if it be taken down, the sick feeth little or nothing, by reason the humours and spirits are resolved: Here you must mark, that some Tayes be sooner confirmed than others: For som are formed in ten moneths, others in five or six yœres, according to the temperature of the person, and nature of the humor whereof it is made: of this divers examples could be given, but for the present I will only recite two; The one of a servant of my Lord of Laudum, who had a Cataract five yœres on both her Eyes, which when I did see, I caused her to stay one yœre there longer, till it became more ripe, then I did couch them both and restored her to her sight. Likewise a Servitour of the Lord of Craiggie Wallace, who had a Tay on his Eyes, the space of nine moneths or thereabouts, which was sufficiently ripe, so I did couch it, & restored him in like manner to his sight. Somtimes the Cataract is accompanied with obstruction of the Nerve Optick, called *Gutta serena*: this you shall know in demanding of the patient, if he doe see any shadow against the Sunne or fire: if he doth see nothing, there is obstruction; and in that case the couching of

Cataracts incurable.

Examples of confirmed Cataracts.

the Cataract doth profit nothing: So it is the best not to deal with such Dayes. The cure is either by Medicine, or Manuall operation: That which is confirmed medicine doth profit nothing. I have oftentimes seen in Paris, and other parts being in practise with learned Physitians, at sundry Patients, that all remedies that could be devised for them, were long used, profiting nothing, but only holding back the ripening of the Day, which I did ever mark, and it was ever more hurtfull, than profitable to the sick. Those which are taken in the beginning may be helped by the form of regiment, Purgations, Glisters, *errhina* or *nasalea* masticatories, sternutories, colyres, ventosies, setons, Cauters, rensures on the temples, vesicatories, bleeding of the arteries behind the eare, with divers other medicaments which have the vertue to discusse and resolve, which are at length set down by Avicen, Ætius, Rasis, Arculeus, Gordonius, Savonorola, Mire. Catin, Galen, Paulus, Mezues, with sundry others, whose opinion I doubt not but the learned Physitian and Chyrurgion will follow, such as are already formed, or yet in forming, and are incurable, either by Physick or manuall operation. Of the which I have repeated divers sorts which may be prolonged, and kept from growing for a long time by the usage of such medicines which are amply prescribed by those learned Authors whom I have rehearsed.

Helps for the Cataract by Physick.

Gualter bra. praxis medicinæ.

Chapter XX.

¶ Of the Cure of the *Cataract* by manuall operation.

Avicen tertia tertii cap. 20.

The Cataract being ripe, which you shall know by such signes as you have heard; the body must be purged and

and prepared by medicines, ſirups, and bleeding if need require, then the ſick ſhall reſt a day or two: in caſe the medicine doth provoke vapours to aſcend to the head, alter the body, and maketh dolour, then the time moſt proper muſt be choſen for the cure, which would be in the Spring time or Sommer, or in other times for neceſſitie, the weather being temperate and dry neither rainie, windie, over-hot, nor cold, neither over-light, nor obſcure, the waxing of the Moon is moſt meet for divers reſpects before the operation: The ſick muſt uſe a ſtraight diet, eating little and drink very weak two dayes before the cure: As alſo the whole time of the cure, then crave Gods bleſſing for his aſſiſtance, as we ſhould doe in all operations, which being done, we come to the mannall operation, which ſhall be meeteſt in the morning about eight or nine of the clock: the patient being weak, give him a toſt of bread with ſmall wine, or clean Ale, thereafter ſet him on a fourm or ſtool in ſome light place, in ſuch ſort that his face be directly before the Chyrurgion, then one muſt ſtand behind him to hold his head faſt and ſtable, and another muſt hold up his eye-lide with his thumb and finger, that the Chyrurgion may ſee the better; that being done, the Chyrurgion ſhall ſit on the ſame fourm, or ſome other ſeat ſomewhat higher, directly againſt the ſick, and ſo neer, that the hands of the ſick may reſt upon the Chyrurgions thighs, then the Chyrurgion ſhall rubb the Needle

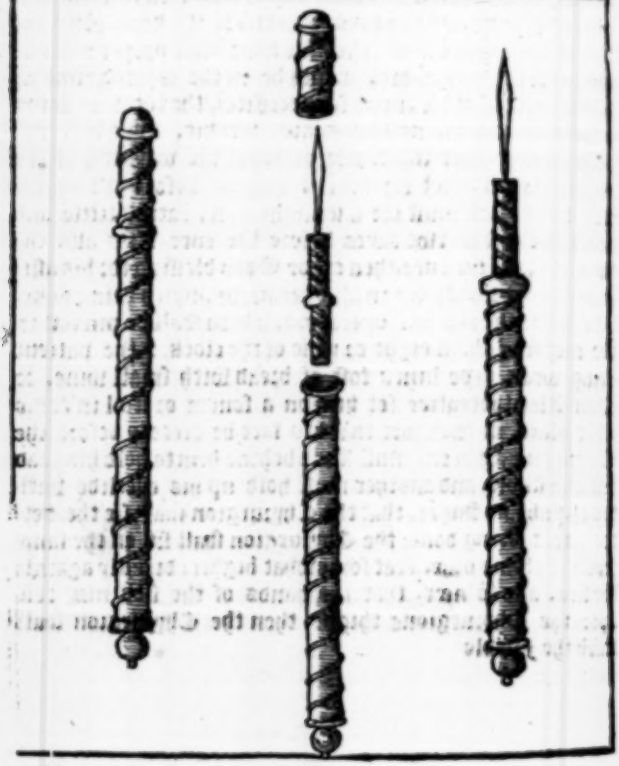
Temperate time for abating the Cataract.

Goe to the operation in the morning.

The manner of abating the Cataract.

Needles

Needles to abate the Cataract.



The Needle must be smooth and hot.

often in lom cloth to make it ſound and hote, it muſt neither be rough nor cold to the membraines of the eye: then the operatour; or ſome young childe who hath a ſweet breath, ſhall chew Cynamon, Ginger, Cloves, or Fennell, and ſpit it out, and breath three or foure times in the eye of the ſick, it being open; & that prepareth the eye, & maketh the Cataract

more

more thin, then he shall cause the sick to close the whole eye, and hold it close, for if it move, the sore moveth also, & hindreth greatly the operation. Next the Chyrurgion shall cause the patient to open the sore eye, and turne it towards the nose: if it be the right eye, the Chyrurgion shal with his finger and thumb of the wrong hand open the eye, hold it stable and firm, which being done, the Chyrurgion shall thrust in the Needle, which must be sharpe pointed, a little lower than the middest of the eye, overthwart the membraines named *Conjunctiva* and *Cornea*, taking alwaies heed not to offend the vaines of the Conjunctive, let it goe towards the side of the little corner which is neare the temples, directly to the fore side of the cataract, not advancing over far: Some doe counsail that needle be so conveyed, that it be the thicknes of two sixpences from the black of the eye, so is it the easier to be touched low, but it is difficiler to pierce: others passe the needle through the middest of the black of the eye, conveying it before the Cataract til it come to the top of it, & taking good heed in pricking of it, then by little and little turne the needle gently, untill such time as you couch it to the lowest part of the eye, and being there hold it down a pretty space, then retire the needle the way that it went in; if it doth rise againe, as often chanceth, the dolour being ceased, passe the needle as before, but not at the same passage: apply suddenly your apparell, that the eye be neither too light, nor exposed to the eare, which shall be made of whites of eggs beaten with Rosewater and oyle, and putting cotton or soft cadus, and apply it to the eye with a soft cloth wet in the same, and apply on both the eyes, with a restreintive on the forehead and other neere parts made of whites of eggs, bolarmeni and sanguis draconis, let all lye for two or three dayes, if other accidents happen not: this form must be continued for twelve or fifteene dayes, handle it every day once, keeping his bed, and moving his head so little as may be, and his head must ly higher than the rest of his body in all this time use only broths and other supping meats, abstayning from hard

The Needle must be sharp pointed.

Divers formes of using the Needle.

It must be handled every day once.

Not for to move the teeth till the accidents be past.

hard meat, or any thing that moves the teeth: the moving of the teeth draweth the humor to the eye, and causeth the Cay to ascend again; ever when you dresse the sick, keep the windows shut and the candle behind him, over great light troubleth the eye and dissipateth the spirits: this order you must observe till the accidents be past, then remove the apparell and wash the eyes with Rose, Fennell, or Euphrage water, wipe them with a soft clean cloth, then put a lighted candle before the sick in a great chamber, causs him first to ope one eye, but take heed that neither of the eyes be opened untill six or eight daies be passed. When the cure is perfected and the accidents going, he must yet for a space be kept quiet, holding a green cloth before his face, and use conservatours of green glasse: let him to light by little and little; for being overcom exposed to great light, it will be hurtfull.

The sick must be put to light by degrees.

Here you must mark, that sometime in passing the needle some veins or arteries are opened, so blood issueth, which joyneth with the humor Aqueus, in such sort that you would think the eye to be lost, yet in three or four dressings it becometh well. This I thought good to shew, that the yong Chyrurgion be not discouraged. There be som sort of Cayes which are so soft that they may not abide the needle, such are called Cataracta Lactea, being like unto milk both in colour and substance: in those sorts of Cayes the Chyrurgion must with his needle presse it on every side, so the most grosse part will fall away and become low, the thinner part will consume in such sort, that ostentimes the sick recovereth his health, as I have sometimes seen: as for a number of other simptoms which happen in the cure of the Cataract, you shall take advise with Rasis, Jesus, Rondoletius, Petrus Franco, Jac. Guilmeau, and divers others.

Cataracta Lactea.

The cure of the *Cataracta Lactea.*

Chap. XXI. Of the dolour in the Eares.

Barthol. de proprietat. rerum.

The Eare, which is the instrument of hearing, hath the name Auris, as Haurio to take, because it taketh the voice

voice and ſound of things which are brought unto it, and ſerveth man for many uſes, yet is ſubject to divers diſeaſes, as dolour, apoſthume, inflamation, wormes, ulcers, ſounding or noiſe, deafnes, and ſundrie others: The dolour of the ear happeneth many waies, as by cold, heat, or by both, by wormes, &c. Thick and vaporous humors, which ſtop the paſſages, apoſthumes, ulcers, criſis of fevers, and ſuch like. Like as there is divers cauſes of dolours, ſo there are divers kinds. Galen maketh mention of five kinds. The ſignes are knowen by the temperature and words of the ſick, as heat, inflamation, diſtention, heavineſſe, and ſo forth: the diſtention doth declare vapours or wind, the heavines declareth a groſſe ſlimie humour. The Judgements, if it happen either with vehement fever, or in the criſe of fever it is dangerous: if the dolour be in the cartilage or outwardly in any part of the ear, there is ſmall danger; if within the conduit or hearing of the nerve auditur, it is perilous, & death often enſueth. The Cure conſiſteth, firſt in taking away the cauſe by purging the humor that offends, by bleeding of the cephalick vain and ventoſing, if there be inflamation: next, in preſcribing of dyet according to the nature of the pain, abſtaining alwayes from vaporous things. As for locall remedies, if the pain doe proceed of cold, apply hot remedies without: as alſo inſtill within made of oyle of Rue, Lillies, & Cyprus: if it proceed of heat, apply outwardly, & inſtill within whites of eggs, oyl of Roſes, Wormwood, and pap milk: if dolour happeneth by inflamation draw blood as counſelleth Paulus, and foment with Roſe oyl, or diachilum diſſolved with oyl of Roſe, and Anethum, as counſelleth Mezues. If the dolour commeth through wormes in the eares, you ſhall inſtill the juice of Abſynth, Capers, Calaminth, Sentorie, or figs; if it proceed of thick groſſe humors or vapours, you ſhall make a decoction of Cammomill and Anethum; receive the ſume of it by a pipe of white Tin or Braſſe, otherwiſe inſtill juice of Rue or water of milk diſtilled with a little Saffron.

Cauſe.

Divers kindes of dolours in the eares.

Signes. *Paul. 3. ca. 23.*

Judgements.

Hippo 3. Prog. text. 15. Gal 10. meth. cap. 7.

Cure.

Arculan. Avicen.

Dolour by wormes in the eares.

CHAP-

Chap. XXII. Of the tumors in the Eares.

Cauſe.

There cometh many grievous tumors in the eare, which ſometimes poſſeſs the whole eare, other whiles ſome part thereof. The cauſe is an hot corroding humor, deſcending from the nerves of the firſt conjugation, which are diſperſed in the conduits of the eares, by the dura mater: it doth proceed likewiſe of a vaporous ſpirit and cold thick humor, which maketh difficulty of hearing, and ſometime deafneſs. The ſignes are manifeſt. The judgements, young people are more grievouſly tormented than old, and doe often die before it came to ſuppuration, and that within ſeaven dayes, by reaſon of the great accidents, like as feaver, lightnes, and ſounding. In old folks it commeth often to ſuppuration, yet the dolour is very vehement, by reaſon of the nerve: alſo by the membrains for the propinquity with the brains, nature hath given it an exquiſite feeling. The Cure conſiſteth in remedies univerſall and particular: univerſall, like as good dyet, abſtaining from wins and all ſumme drink, bleeding in the cephalick vein, if age permit; alſo uſing of gliſters, or ſom gentle medicines according to the humor, as you have heard in Ophthalmia. As for particular remedies, they differ not much from others, except that we uſe no repercuſſives, neither any cold remedies, by reaſon of the nerve which is cold, deep, and hollow: if the dolour be vehement with heat, uſe oyl of Roſes, Mirtills and Didonitum, and a little vinegar mixed all together, whereof you ſhall drop a little in the eare. Querſitanus doth much allow Cats water diſtilled: if it tend to ſuppuration, handle it as other apoſthumes.

Signe. Judgements.

Young children dye of it.

Cure.

Cold part 3

Querſit. oleum mcaica.

Chap. XXIII. Of Ulcers in the Eares.

Definition.

The Ulcers which happen in the eares, are nothing but a ſolution of continuity, with matter purulent either externally or internally, accompanied with dolour, feaver, and divers

divers other simptomes. The Cause of these humors doe proceed of a corroding sharp humor, stroks, falls, defluxion of humors, apast humors, or any other thing that hath the vertue to putrifie & corrode. The signes are manifest. Avicen, Rasis, and Arnaldus do say, if either humor sanguinolent, seride, or purulent matter issue out at the ear, it betokeneth some ulcer, grosse humor, or fistule to be there. The Cure doth first consist in good diet, next in purging the ulcers: if there be ulcers, you shall distill in the ear, oyl of eggs, or distilled water of Allom: or this which I do use, take Locks & boyl them in oyl till the third part be consumed, then strain them through a cloth, and instill it twice a day in the ear, let the patient lie on the sore side, so the matter will avoid the better. If with these ulcers there be purulency and rottenes, you shall instill juyce of Absynth, with a little honie or juice of Onions, Woodbine Bacis pallaris, oyl of Turpentine, or bitter Almonds: some use for this purpose, to instill the urine of a young child warme, it hath the vertue to drie up the humors in the eares; of the ulcers Gale. hath amply spoken. If there be wormes or thæp-lice, as often happeneth in the ear, you shall instill juice of Absinth, Capers, or a little Scammonie with Vinegar also juice of Absinth, Calaminth, Centory, or Figs, likewise a little wine wherin hath been boyled Sarrubium. Some do use the gaule of an Ore distilled in strong vinegar, and are laid hot in the ear, sternatories are also profitable. Rasis counsaileth for this purpose to instill in the eare succus mentastri, or folia persicorum, aut nuclea eorum, or a little Aloe dissolved with water or urine: this remedie doth not only kill these wormes and thæps-lice, but also other little beasts which enter in the ear, or ingendereth in ulcers elsewhere. As touching that grosse humor or passage that doth stop the passage of the ear, you shall make a decoction of Camomill and Anethum, & receive the fume at the ear, by a pipe or instrument proper to that effect, or else instill juice of Rue or milk with a little saffron: it happeneth oftentimes that those little wormes, thæp-

Cause.

Signes.

Cure.

Mes. de agritud. oculorum.

Rasis. li. 11

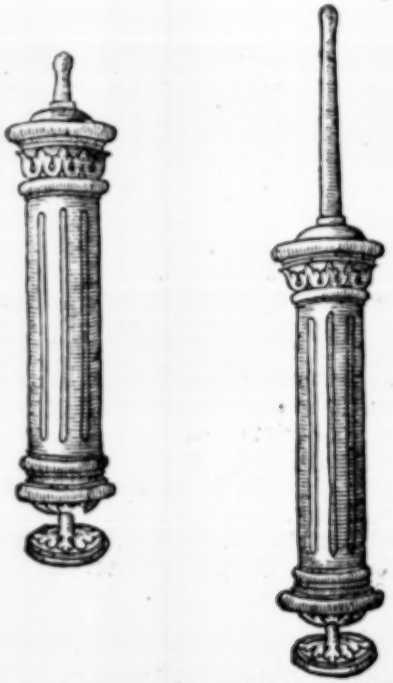
Petrus Hispanus.

Cels. li. 6. cap. 7. & 11.

Decoction for the passage of the ear.

ſharpe lice, or groſſe humors remaineth in the ear, through the debilitie of nature, or otherwiſe; for the which I doe vſe a Squirt or Syring of braſſe or white yron called Pynclum,

Syringe, or Squirt for the eare, or hollow Woundes.



Gal. 3. ad glau. which hath a mighty vertue in drawing out of any thing that is

is inclosed in the eare, being properly made for that effect, as you see in this portraiture.

CHAPTER XXIIII.

Of the tumor which commeth behind the ear called *Parotides*.

LIke as in the munctoires of other noble parts of our body, nature hath likewise placed in the craige and roots of the eares, which are the munctoires of the brains, certain little kernels or glands to receive that matter or vapour venemous deposed by the brains called Parotides, which is an inflamation or apostume, of the glands behind the eare. The cause doth proceed of the abundance of pure hot blood, and then it ingendereth flegme with vehement dolour some time it doth proceed of aboundance of cholerick blood, and it doth ingender Erefipelas: sometime it proceedeth of the melancholick blood, then the tumor is some what hard, not reddeth without great pain: if it proceed of the pituitous humor, the tumor is somewhat pointed, white, not dolorous: sometime it doth proceed of an humor fallen from the head, because nature hath ordained those glands for that effect: as also because they are soft and cold, and the passages large, whereby the humor commeth: sometime the humor commeth from the whole body, like as in crisis of fevers: it may also proceed of any one of the four humors, or of all being mixed together. The Signes are tumor, dolour, vehement fever, pulsation, with such other signes, as you have heard in Tumors. The Judgements, those which come by crisis without signe of maturation are evill, e going to the internall parts for the most part is mortall as saith Avicen: sometime it doth vanish away, and passe with the excrements, as I once observed of a Gentleman in Paris called M. Buchar, who had a Parotide readie to be opened, the which in one night vanished away with the excrements, as was easily perceived, and the purulent matter seen with the matter fe-

Celsi li 6 ca.16.

Definition.

Cause.

Tra.li.3 ca.10.

Pau lib citato.

Lanfranc tract.

Avicen qua 4 tertii ca.24.

Signes.

Judgements.

Cure.

fall, and so becommeth whole. The Cure is first to use glisters, and bleeding in the vaine cephalick, remembring if it proceed of Crisis of fever, you must not let blood in respect of weakneſſe and imbecillitie of the sick, by the ſickneſſe precedent: good dyet must be observed, using things of good digestion and not vaporous, abstaining from all strong drink. The particular remedies differ not from the cure of other aposthumes, except that we use no repercussives nor refrigerants, but only maturatives; as this, take an handfull of Surucks, Lille roots half an handfull, roſt them within a peece of wet paper under the hot embers, then add unto them two yolks of eggs, some Hogs greaſe, and de althea, beat all together in a morter, and apply it warm to the sore upon a cloth: or this, take fine white flower two ounces, powder of Linſeed, and Fennigreek, of each one ounce, Hogs greaſe 2 unc. figs half an unc. mix all with a little decoction of Mallowes, Althea, and flowers of Camomill, of all those make a Cataplaſme and apply as the former. I often doe use in those tumors this which is maturative and anodine, and is made of the crums of white bread, infuſed with milk, Linſeed, and Fennigreek, oyl of Lillies, Roſe flowers, Camomill, and Melilot, of each so much as shall be expedient to make a plaiſter of good conſiſtance, adding to it a little Saffron. If the tumor be slow in comming forth you shall use ventoſies and medicaments, attractives and anodines, with some degerents in the beginning, like as oyl of Lillies, Iris, Camomill, bitter Almonds, and apply on the part, with sheeps wooll: it is not best to abide the perfect suppuration of this tumor, but so soon as may be, to open it and give it aire, by which means the humor or venomous vapour doth diſſipate, so the colour diſſipateth & nature much dischargeth. It may be opened either with Cautor or Launcet, taking good heed of the nerve, vein, and arterie, whereof oftentimes commeth great accidents: after it be opened, you must use ſuppuratives, mundificatives, incarnatives, and deſiccatives, as you have heard in the Tumors.

Cataplaſmes

Ventoſies to be applyed in tumors.

CHAP.

CHAPTER XXV.

¶ Of the Tumor in the Nose called *Sarcoma*, *Ozena*, and *Polypus*.

The Nose is a part of the body, by the which the brains doe discharge the excrements; in it happeneth divers diseases, but chiefly three sorts, which doe not much differ one from another. The first is called Sarcoma, which is a tumor or excrescence of flesh against nature. The second is called Ozena, which is a profound ulcer, evill savoured, and dangerous. The third is called Polypus, which differeth not from Sarcoma, save only that it is not so big. Polypus is a tumor or excrescence of flesh, which proceedeth of the bone Hethmoides, or that of the nose, and doth stick fast to it: it groweth by little and little, yet in time it becometh so great, that it filleth the whole conduit of the nose, sometime it hangeth down to the lip, hindring the sick to speak or breath: sometime it groweth behind in the hole where the ayre cometh to the nose, in such bignesse that it filleth and stoppeth the passage of the trahe artier, putting the sick in danger of suffocation. The cause is a corrupt thick viscous humor, which commeth from the head to the nose: Also wounds apostumes, or ulcers, which are accompanied with a sharp bitter humor, and doe corrode the part where it is, and taketh rot. The signes are manifest, as by the narration of the sick, accompanied with rottennesse, evill savoured, livid coloured, sometime hard, others soft. The judgements, That which is hard, black, dolorous, fetide, malignant, and cankerous, should not be touched, save only in applying medicaments, refrigeratives, desiccatives, and mitigators of dolour, having the vertue to impash the growing of the disease, as in the Chap. of Cancer you have heard. That which is reddish and brownish with colour, is difficile, and if it possesse both the sides of the nose, either the sick doth suf-

Contra. *Ozenam.*

Definition.

Paul. lib. 6. cap. 18.

Alo. lib. 2. ca. 26. Rasis lib. 9. cap. 10.

Cause.
Haly Abbas lib. 9. Gal. de comp. medic. cap. 3. Aranus lib. 2. cap. 11.

Signes.
Judgements.

focate or ſlæpeth with open mouth. If the excreſcence be ſoft and without dolour, and taken in the beginning, it may be cured. The cure is very difficile, as often I have experimented: and in the moſt part of thoſe tumors, it were better to uſe ſuch remedies as you have heard, than to adventure any cure. Allwayes in ſuch as you find tractables, you ſhall firſt uſe a good regiment tending to ſobriety; next, univerſall remedies are to be followed, as purgations, bleeding, and rubbing of the head, with ſuch things as have the vertue to corroborate the brains and drie the evill humor therein contained. The particular remedies ſhall be according to the tumor, which ſometimes is hard, otherwhiles ſoft: ſuch as is ſoft, white, and not dolorous, is taken away by inſtruments, as did ſome of our ancients moſt expert Chyrurgions, who did cut the Polypus all about at the root, ſaving allwaies the cartilage; thereafter with a proper inſtrument called by the Greeks Polytricon Pathcon, did pluck it forth at the root, and cureth it as other Ulcers. Others doe counſail to make inciſion in the cartilage of the noſe; thereafter pluck it out by the root, which being done, if there remain any of the root, as often happeneth, it doth augment in ſuch ſort, that better it had been not to be medled with, than to conſume that which doth remain: cauſtick powders may be uſed, like as Roſſanus and Arcæus mingled with a little honey, and applyed. Likewiſe melted Cauters, Arſenick, powder of Antimonie, Calcanthum, Mercurie, Squamæ æris, oyle or powder of Vitreoll, Atramentum, ſutorium, ſtrong water, and ſuch like, in the which you may wet tents of Cotton, and apply with Henny or Unguent, Apodine, to ſuch time that the excreſcence be conſumed, uſe allwaies deſenſives: for the inflamation, Unguent Pomphologos, with a little Valaſt is good. Some doe uſe to conſume the excreſcence with actuall Cauters, conveying it in with a Canule or hollow inſtrument, to ſave the other parts from the injuris of the hot iron: ſome of thoſe practicks I have ſeen and aſſayed (but with ſmall ſucceſſe) except ſuch as have been ta-

Cure.

Fuchſius lib. de meden. morb.

Polytricon.

Laugſrancus. Guydo. Rogerus. Brunus.

Medicaments to conſume the *Polypus*.

ken

ken in the beginning, and not malignant: hereof my adviſe is, that you tent not ſuch cures, but rather uſe ſuch remedies as have the vertue to hold it back, with this water to waſh it.

Rec. baluſtiorum corticis malorum granato an. lib. 1. galangæ, caudæ equinæ, linguæ paſſerinæ, herniariæ an. manipulos duos, radicis biſtortæ unc. 4. contundantur & ſimul diſtillantur, & fiat aqua; with the which you ſhall often waſh the ulcer of the noſe, if you ſhould add to it a little Allom, it were the better: if either of thoſe tumors degender in Cancer as often times happeneth, have your recourſe to the chap. of Cancer.

Water for the Polypus and other ulcers in the noſe.

Chapter XXVI.

¶ Of the fluxion of blood at the Noſe.

Forasmuch as the blood is the treaſure of life, ſo it is neceſſary if it flow exceſſively, that it be ſtayed by fit remedies, otherwiſe death enſueth. The Cauſe of this flux happeneth by opening of the mouth, of ſome vains in the noſe which happeneth either by cauſe extern or intern. The externall cauſe is ſtrokes, falls, vehement exerciſe, great heat, and ſuch like. The cauſe intern proceedeth of too much blood, retention of the moneths, or by the acrimonis of the humor that floweth to thoſe veins, which doth corrode them: alſo criſis of fevers, frenſies, pluriſies, apoſthumes of the liver or ſplene, ſometime the flux happeneth without the criſe, as from the liver, ſplene, or matrice, debilitie of the vertue retentrix. The Signes are evident to the ſight, beſides if it happen through aboundance of blood, there will be great pain in the head, redneſſe in the eyes, much blood in the face; if it proceed from the liver or ſplene, you will know by the dolor of thoſe parts, or from the matrix, you will know by retention of the moneths. The Judgements, if the flux proceed from the matrix, it will be difficile to cure, & if it flow much it is evill and dangerous, that Hydropſie will enſue: if it proceed by the debility of the brains, hardly doth it ever heal: if the colour of the blood be pale, livide, green, or brownish,

Cauſe.

Flux of blood at the Noſe come of two cauſes.

Gord pace.

Signes.

Judgements.

Gualte. Brane.

it is for the most part mortall: if it happenneth with sincops or cold of the extreamities, it is also mortall; all flux which cometh suddenly and by violence, is evill. The Cure is first in good diet, using such things as are of good juice and digestion, and have the vertue to cool and make thick blood:

Cure.

Nert, if there be plenitude, and age permit, you shal open the vein cephalick of the arme opposite; nert use frictions downward to the inferior parts, straight ligatours of the armes, thighs, testicles, and legges, to divertise the blood; Also ventosies, with scarrification on the shoulders: If it flow from the right nosthrill, apply ventosies on the liver; if from the left, put the ventosie on the milt; if from both the passages of the nose, apply ventosies on both those parts: If it floweth in great aboundance, notwithstanding you shal let blood the cephalick vein on the same side, if strength permit: if it come from the matrix, you must provoke the monethly courses. The topicall remedies shall be in application of cold things to the head, temples, neck-vein, jugular, and other parts, from whence the cause doth proceed, which shall be made either of juice or distilled waters of Surucks, Lettice, Plantane, Bursa pastoris, Knot-grasse, Vinca pervinca, and such others of that qualitie, wet a linnen cloth in those waters or juices, and apply to the forsaid parts & testicles. The like may be don with vinegar; also you may put in the nose this remedy which I doe comonly use, that is made of Egg-shells, Bzeth half an unc. Gauls two drams, Sanguis draconis, and Truboll, of each half an unc. hairs of the belly of an old Hare shall cut a little, mix all those together with Vinegar, and whites of Eggs put on tents and put up in the nose; Also apply only upon the nose forehead, and testicles, with a double cloth that hath been wet in Vinegar: Also mans blood dryed in powder and put up into the nose, is very good: Or this, Take Truboll three drams, Dragon blood, Frankinsence, Aloes, Mastick, of each one dram, hairs of the belly of an old Hare small cut half a dram, put all those in small powder and blow up into the nose, & make a

Vena cephalica.

Paul. 2. ca. 24

Paul. eo. cit.

Ligatures to be applied for bleeding of the nose

Paul. 3. ca. 11.

tent

tent of cotton to hold it in. The common people doe only uſe for all fluxes of blood at the noſe, Hogs dirt put in cotton or a ſmall linnen cloth applyed to the noſe: Alſo the ſmoke of it received by the noſe, is good. John Lebot approveth the herb Bʒ malus or Agrimonia to hold in the hand on that ſide the blood floweth at. As alſo he counſaileth to write on the forehead of him that bleedeth (with his own blood) conſummatum eſt. Hieronimus Cardanus, who hath more curiouſly than divinely written, doth counſail in great flux of blood, to pronounce theſe words following thrice over, *Sanguis mane in te ſicut Chriſtus fecit in ſe, Sanguis mane tu tua vena ſicut Chriſtus in ſua Pœna. Sanguis mane fixus ſicut Chriſtus quando fuit crucifixus.* This form of cure by words I doe not allodge here ſo much for any effect I look ſhall enſue thereupon, as for to content a number of ignorant arrogant people, who neither will ſuffer pain, give leiſure, or reward more expences for their health, but doe ignorantly upon preſumption imagine that all diſeaſes ſhould be helped at their pleaſure; To ſuch people & to none other have I ſet down their remedies by words, which I hope in ſome meaſure ſhall ſatisfie them.

Joh. Lebot lib. 2. of the country Farm.

Cardanus cureth by words.

Chap. XXVII. Of the Lips and their diſeaſes

The Lips which the Greeks doe call Cheile, and the Latines Labra or Labia, are ſo called, as ſaith Iſidorus, a lambendo to lick. Conſtantinus ſaith, That the lipps doe beautifie the mouth, teeth, and gums, and doe help the forming of the voice, with divers other commodities, alwayes they are ſubject to divers diſeaſes; yet for the preſent I am only minded to ſpeak of thoſe which are moſt common and may be helped, to wit, paleneſſe or lividitie, Fiſſures, reeds or hacks, with the cut or rawing lip, called the Hares lipp. The paleneſſe or lividitie happeneth oftentimes by fear or ſodain commotion, which ſodain paſſion retires the blood to the centure from whence it came; which being paſt, and the blood

Iſidorus. Conſtantinus. Gal. li 11 de uſu partium. The lips beautifie the mouth.

blood ſetled, the lipps return to their own naturall. It happeneth alſo of the diſeaſe which is incident to women, called the pale colours, and muſt be cured by purgations, baths, decoctions, ſirups, apereticks, and ſuch others as ſhall be devised by the skilfull Phyſitian: Sometime it doth proceed from the mouth of the ſtomack, by the great communication which is betwixt the ſtomack and lipps by a membrain, as may be perceived by the trembling of the lipps in the time of vomiting: That ſort of paleneſſe is helped by rubbing of it gently with a peece of Sæpe-skin that hath been dyed red. Or this, Take red ſanders contuſed and ſteeped three dayes in Aquavite or ſtrong Vinegar, boyl them all on a ſoking fire an hour, with a little Allom and gumme of Arabick, then paſh it and rubb the lipps therewith; Some for this purpoſe doe uſe the rid of Spain: there be divers other remedies ſet down for this purpoſe by Lebot. The hacks or ridds of the lipps, is a ſolution of continuity in the tender fleſh of the lipp, which doth happen by cauſes extern and intern. The externs are hurts, cold, great heat, wind, duſt, and ſuch like. The internall cauſe is a ſharp ſalt humor that commeth from the brains, and corrodeth the part: ſomtimes it happeneth by criſe of fevers aſcending from the ſtomack, liver, or all the body. The Cure, if it proceed of heat, you ſhall rub the Ulcer with oyl of Roſes, Violets, Capons greaſe, Puſſilages of Dragagant, extracted in Roſe-water, and annoynt the part: Or take gum of Dragagant, gum Arabick, Maſtick, tempered with hony of Roſes and annoynt the part. If the cauſe be intern, purge the body, and let blood the vein of the lipp, thereafter annoynt the part with whites of Eggs and powder of Maſtick: Alſo oyle of Mar or of Eggs: Or this pomade thus made, Take half a pound of Harts or Goats greaſe, one ounce of Hoggs greaſe, waſh them well in white wine, thereafter expreſſe the greaſe from the womb, then put to it one grain of Nardin, four drams of Cloves in fine powder, Nutmegs half a dramm, two fine apples half contuſed, infuſe all

Cauſe of paleneſs in the lipps.

Cure for the paleneſs of the lipps.

Cauſe and cure of hacked lipps.

Gard. part. 3. cap. 14.

all in Roſewater a whol day, then boyl all in an earthen pot, and ſtirr it about with a ſpæl of wood, untill ſuch time that the Roſe-water be erhaled, then ſtrain it through a ſtreng cloth, and add unto it one ounce of oyl of ſweet Almonds, with an ounce of white Wax, then melt all on the fire, then retire it and let it harden, thereafter waſh it with Roſe or Damask water if you would adde unto it ſome red Corall or Cinabir well beaten on a marble ſtone, it will be more dying, and alſo give it a reddiſh colour. I have often uſed in thoſe hackes, as alſo thoſe of the hands or other parts, unguent Roſes Mezue, with a little Ceruſe, Campher, Allom, or a little of the ſæd of Juſquiam in powder, or any one of thoſe, or a little of each one mixed with the Unguent will ſuffice, being rubbed on three or four times a day.

Pomade for hacked or ſore lipps.

Unguens for hacked lipps.

Chapter XXVIII.

¶ Of the Hareſhaw, or Cloven Lipp, called the *Hares Lipp.*

The Hare-ſhaw, is a defectuoſitie of nature, which happeneth either by nature, or accident in the Lip, Ear, or Noſe: they, or either of them are ſometimes found cloven, or they come in the world: It is ſomtime little, otherwhiles ſo big, that you would imagine a peice taken out of it. Such as are little cloven may be cured: if they be much rent, hardly do they receive any cure: ſuch as are in old people, & of evil habitude, are very hardly cured. The Cure, it being either by nature or accident, nothing can be added to it, but may be ſoyned together by a ſuter incarnativ, as you ſhall hear in the generall Chapter of wounds. The form of the cure is this, firſt purge the body if the perſon be of age, then dyet the patient the night before, next, place him in a light part, then with your left hand lift up the one ſide of the lip: then with a ſharp

Definition.

Judgements.

Cure.

Celſ. li. 7. cap. 9.

How to cure the Harelhaw.

ſharp biſtory or launced curbe, cut the outward skinn till you come to the middeſt of the text, which being done, you ſhall lift up the other ſide of the lip and doe the like, ſo both ſides ſhall be altogether like unto a great wound, let them bleed a little to diſcharge the part and avoyd inflamation, which being done, joyn the ſides together ſo juſtly as you can, then thruſt a needle through both the parts of the lipp, taking a reaſonable gripe, letting there the needle remain: then turn the thread about it after the form you ſee aged women or Taylors doe, when they keep the needle on their breaſt.

A needle to be uſed for the Hare-ſhaw.

Portraiture



If the Needle be too long, cut the end of it with Tenals inciſives: if the cleft be long, you may thrift two Needles one above another: if by thoſe means the ſent doth not joyn together, but be too ſtraight, in that caſe you ſhall in each ſide a little from the ſent, make a little inciſion circular in the outward skin, in form of an half moon, ſo the ſides ſhall joyn

more

more easily: beware in using any violence, for the which you must consider before the operation, if the tenth be so larg that it cannot joyn easily, it must not be stretched to joyn, least you make a greater deformitie, besides it will be an hinderance to the speech: the needle passed as is said, you shall put upon the wound an astringent, with compres in orderate the emplaster of Betonica or such like: it doth commonly conglutinate in 8 or 10 dayes, after the which time cut out the thread & pluck out the needle, correct the superfluous flesh if any be, and induce the siccatrice. As touching the incisions which are made in form of an half moon, handle them as simple wounds in the flesh. And as touching Clifts or Fenths in the eares or nose, they be handled after the same form.

Astringent for the Harethaw.

CHAP. XXIX. *Of the mouth, tooth, and tooth-ach.*

Gal. li 3 & 11 de usu partiu

THe Mouth, which is called in Greek Stoma, and in Latine Os, is scituated nere the brains, like as all the instruments sensitives: it is the instrument of crying in beasts, and speaking in men, and is called by Isiodorus the messenger of the soul, for we speak by the mouth that which before we conceive in soul and thought. Gregorie sayth, that the mouth hath many kepers, to the end the soul and wit may deem and advise first what to speak, before any thing be spoken: it serveth for many uses, and in it is contained many notable parts, but here I will only touch such as I am mindfull to entreat of, like as the teth, gummes, tongue, Uvula clap, or pap, Amygdals, beginning at the teth, called by the Greeks Odontes, and in Latine Dentes, which are of the number of bones, and be in number thirty and two, to wit, eight called Incisores, because they cut the meat we eat, then followeth the four called Canini, for the similitude they have with hounds teth: they be sharp and round pointed, and break the hard meat which the incisors cannot cut: the third sort is called Molares, and are in number twentie, & in some fewer, they doe grinde the meat after

Isiodorus.

Gregorie

Gal li. de offic & 11. de usu partium

after it be broken by the other teeth, and serve for decoring the mouth, chew the meat, help the speech and pronouncia-tion: Also by them we may prognosticate long or short life, as witnesseth Hippocrates in his Presages: and they be subject to divers passions and diseases, as dolour, corruption, perforation, cave or holed, and divers others, as you shall hear at length in the chapter following. As touching the toth-ach, or dolour of the teeth, I am not of opinion with som of our ancients, who thought the teeth to endure any dolour being a bone, and no bone hath any feeling. Aristotle saith, that neither bones or nails have any feeling, they being a terrestrious matter: that dolour which grieves us, is at the rot of the teeth, either in the nerve or ligament which cometh to it, and is most cruel of all pains. Galen saith, amongst all maladies and passions which are not mortall, that of the teeth is most painfull unto man, for the proximity and communication that the nerve hath with the brains and membrains: thereof some have been of opinion, that there are worms which doe engender in the teeth, and cause great pain, perswading the cõmon people to the same: by which opinion the cõmon Barber Chyrurgions doe commit great errour in plucking out of innumerable teeth which might well serve. There are no worms that procure this dolour, but only corrosion of the nerve by the acrimonie of the humor, as may be perceived after the toth is plucked out and broken, the end of the nerve which is inserted in it, is corroded a growing red, which nerve is subtil and delicate, that you would think it to move. We see divers who have their teeth almost all consumed without any pain, others having only a little hole in the side of the teeth, have intollerable pain, which cometh by the humor that corrodeth the nerve. The Cause of the toth-ach is externall and internall: externall is falls, hurts, great heat, cold, breaking of hard things, and too much curiosity in rubbing the gumms, and taking away the flesh at the root of the teeth; as also in being too negligent in cleansing the teeth after meat, so the filth remaineth

Hippo. in his Presages.

Arist. 1. & 3. *de anima.*

Celsus 6. *cap.* 9.

Worms are not ingendered in the teeth.

Rando. meth. curand. morb.

Cause.

and

and doth putrifie and corrode. The cauſe intern proceeds of humors, which having acrimonie and qualitie maligne, that commeth from the head, as happeneth in Negroes, which humor doth flow to the gummes and roots of the teeth: Alſo rotten ſharp vapours aſcending from the ſtomack, and maketh corroſion of the teeth and nerve, by the which enſueth extream pain; it may alſo proceed of any of the four humors: aged people which are much ſubject to defluxions of the lights or brains, are much ſubject thereunto. The ſignes are evident, and may be known by the patient and aſſiſters, as alſo by the cauſe; for if the humor doe proceed from the head or gummes to the nerve, there will be great dolour and heavineſſe in the head, continuall rhums falling on the part, with great evacuation of flegme. If it be of vapours which aſcend from the ſtomack, there will be great heavineſſe and dolour in the part: if the cauſe proceed of the four humors, or either of them, as ſometimes happeneth, there will be redneſs, heat, corroſion, punction, hardneſs, paleneſs, with great ſpitting. The judgements, if the dolour of the teeth proceed from the gums, the dolour is not removed by plucking forth of the tooth: if the pain proceed from the nerve or ligament, by removing of the tooth the pain ceaſeth, by reaſon the matter which did corrode the nerve, was retained by the tooth, and could not eaſily paſſe away: if the the tooth be pale & black in fevers, it is an evill ſigne: if aride and dry like a peece of wood in hot fevers, it is mortall. The cure conſiſteth in generall and particular remedies. The generall ſhall firſt be in the form of diet, eſchewing all things which may provoke great heat or great cold for they are both hurtfull: abſtain from all ſharp, ſoure, ſweet, viſcous, and vaporous things, and alſo milk: you ſhall uſe things of eaſie digeſtion, abſtaining from all exerciſe that may impaſh the ſame: next, if there be plenitude of humors, purge the body, eſpecially the head: if the evill proceed of heat and plenitude of blood, take blood of the cephalick vein, and apply ventoſes on the ſhoulders with ſcarrification, open the Ranules un-

Galide compa. ment per locos cap. 4.

Signes.

Gal. de compo. meds &c.

Judgements.

Hip. 4 aph 53.

Hippo. in his Preſages.

Cure.

der

der the tongue, that of the lips, and rip the root of the teeth, for that doth discharge the part. The particular remedies shall be according to the cause, as if it proceed of an hot humor, you shall retain it in your mouth and wash it in Vinegar, wherein hath been boyled Julqueam, Mandragar, heads of Poppie, Lettice, and Endive, annoynt externally with oyl of Roses, Poppie, Mandragor, apply to the sore tooth 1 dram of Oppium dissolved with oyl of Roses, or Phylonium persicum: if it proceed of a cold humor, you shall wash your mouth and teeth with warm lome, wherein hath been boyled Sage, Betonie, Mint, Parsley, Calaminth, Fennell, Marrubium, and Tormentill, annoynt outwardly with oyl of Cammomill, Laurell, Lillies, Ginnaper, and Rue, apply a little plaister of Mastick or Gumme, alemny on the arterie of the temples, to intercept the humor, you shall also chew in your mouth a little of the root of Angelica, or a clove of Girofell, & put a little of either of those to the tooth. I doe use in those dolours, to apply externally the crummes of white bread boyled with milk, yolks of egges, and fresh butter, adding thereto some Saffron, oyl of Camomill, and Lillies, apply it warm betwixt two linnen clothes upon the swelling or sore; divers other anodine cataplasmes and plaisters may be used for this purpose.

Johannes Servitanus.

Pa. li. 3 cap. 16

Annoynt the tooth outwardly.

Chapter XXX.

¶ Of the corruped and hollow tooth, and the way to cure it.

The teeth as I have sayd, is subject to divers passions and griefes, wherein the hand of the skill Chyrargion is required: like as corruption, perforation, holed, cavernous, gnashing or grinding, trembling, stupiditie, lividity, or blackness, and unstable, for the cure whereof you shall hear familiar remedies in few words. The Cause of corruption which happeneth in the teeth you have heard in the last

Pa. li. 3. ca. 13.

Cause,

Cure.

laſt Chapter. The Cure of corruption or perforation is, firſt in the form of dyet, abſtaining from milk, green fruit, all hard things, vomiting, and things of evill digeſtion: waſh the mouth and corrupt tooth with Claret wine, wherein hath bin boyled a little Tormentill, and Marrubium, next touch the part corrupt with a little Aqua vite that is well rectified, ſtrong water or oyl of Vitreoll, Sage, Cloves, Sope, a little Cotton in either of thoſe, and apply to the corrupt or hollow tooth; beware the cauſtick oyl touch no other part: if by applying of either of thoſe things you profit not, you muſt uſe the actuall Cauter or hot yron, made according to the proportion of the corrupt part, for great perſonages we make thoſe Cauters of gold or ſilver, and apply burning hot, as the other, to the corrupt & hollow part: ſomtimes the corruption is in the ſide of the tooth, which by time might be corrupt: in that caſe you ſhall file away that which is ſpoyled, ſo the remanent ſhall ſerve for your uſe, the file is uſed in ſuch teeth as are more eminent than others, alſo in broken teeth which doe hurt the tongue and lips: by uſing of thoſe remedies, the corruption and pain ceaſeth, except alwayes the tooth be ſo corrupt, that the nerve be corroded; and if ſo be, the beſt way is to pluck out the tooth, like as many now doe, who doe but unskillfully and ignorantly, for every ſmall dolour or griefe, ever perſwading and affirming that to be the moſt ſure and ſoveraign remedy, and oftentimes, which is worſt, they pluck out one or two of the whole teeth and leave the corrupt, as I have ſomtime ſeene by the unskilfull handling of that inſtrument which is made with three branches called the Polycan:

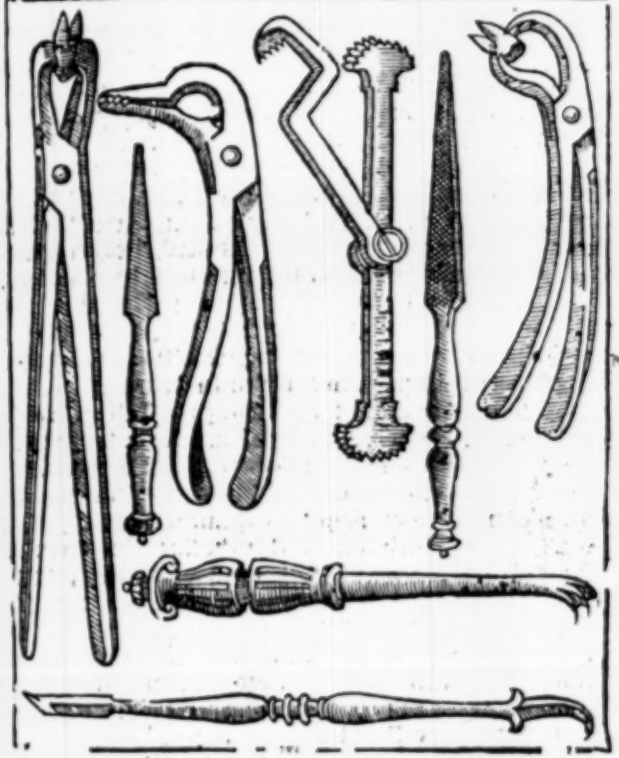
Oyles and Liquors for the corrupt tooth.

Albuc. lib. 1. cap. 21. & 22.

Error by the Polycan.

Inſtruments

Inſtruments to pull out, cutt, and file ſuperfluous teeth.



Whereby often enſueth ſuch flux of blood, that ſome have dyed, or at leaſt very difficile to be ſtayed: ſuch ignorants differ much from the opinion of our ancients, who did ſo eſteem of their teeth, that they never drew them untill they were very looſe, and almoſt fallen of themſelves. In witnes wherof, I have read that in the Temple of Apollo there

was a Turkisse or Davier to pluck out teeth, made of lead, shewing us that the teeth should not be plucked out til they be very lose and almost wasted: but if the teeth be outwardly corrupted, and the nerbe corrodeth with extream pain, that hardly it may be suffred by any; in that case (all other remedies set a part) it must be remedied after this maner: first situate the diseased in a convenient place, in such sort that he may be lower than the Chyrurgion, then separat the fleth from the root of the teeth so deep as you may, then the Chyrurgion shal with the Turkisse or Davier gripe the teeth so neer the root as may be, taking heed neither to gripe overhard, nor incline the Davier too much, least he either break the teeth, or jaw whereat it is fixed: pluck not with great violence, nor at one pluck, least you make dislocation of y mandible, or trouble the eares and temples: if the teeth be hollow or brittle you shal put a piece of linnen cloth or thin lead betwixt the Davier and teeth, in so doing you shall preserve the teeth from breaking: such teeth as may not be handled with the Turkisse, you must use a Pulat to thrust it in towards y mouth of the pelican: the teeth being drawn, you must close the wound with your finger and thombe, then wash it with Vrrecrate and a little salt: if there be flux of blood, you shall apply a little astringent powder upon Cotton, and put in the hole, or Cotton that hath been wet in iuice of Lymons. It happeneth oftentimes that divers of the teeth are loosed or fallen out, either by strokes, falles, or defluxion of humors from the head, with great deformity, impeding the pronunciation of the speech: for remedie whereof we make artificiall teeth of Ivory, Whales bone or hounds teeth, which shall be fastened by a wyre or thread of gold, passing the wyre or thread betwixt y whol teeth on either side next adjacent, then put the artificiall teeth in the part, then knit the thread fast through about the ends of the thread, and cut it so neer as you can: if any portion rest uncut, passe it betwixt the whole teeth, that the tongue or lippes be not hurt by it. I am not mindfull to insist in this practick as I might, because it is

Bleſure de a couper dent.

Paul. li. 6. ca 8.

Celſus li. 7. ca 12.

Albu. lib. 2 cap. 28.

Guy de Chauliac. tract. 2 doct. 2.

ſeldome practiſed. It happeneth ſometimes that two teeth doe ſpring from one root which is a great deformitie, and often offend the tongue within, or the lips, ſometime one teeth is longer than the reſt: for the cure of both, you ſhall cut them with Tenals inciſives made purpoſely for that uſe ſometime the teeth doe gnaſh and grinde by repletion of humors from the head, debility of the nervos which moveth the chaftes, by wormes in the ſtomack, or inteſtines, or rotten humor in the ſtomack, for the which purge the ſtomack and head, rubb the neck behinde with the oyl of Aſpicke, and Camomill: the teeth ſometime doe tremble, chiefly the inciſors which hath but one root. The Cauſe proceedeth of over-great fluxe of humiditie which falleth on the gums, as happeneth ſometime to ſuch as doe ſweat of the French ſickneſſe, in the which the teeth not only trembling, but often fall out: for the remedy whereof, medicaments, aſtringents, & drying muſt be uſed, ſuch as Allom, Nuts of Cyprus, roots of Biſtort, red Roſes, and ſuch like, of the which you may make a decoction: alſo water wherin hot ſteel hath been quenched, called Aqua ferrata, rub the gummes and roots of the teeth therewith: you may alſo for this purpoſe uſe a little Allom water, or a little Salt that hath been melted in the mouth: theſe things doe drie up the humiditie, but you muſt beware in uſing over-drie and aſtringent things, and ſuch as doe break the teeth, as Nutgals, Pomgranats, and other of like quality. Sometime there happeneth a ſtupidity in the teeth, which doe proceed of ſome aſtringent or ſharp humor, either at the roots of the teeth aſcending from the ſtomack: it happeneth alſo by imagination or apprehenſion, as when the ſick ſeeth another eat ſower fruit, or any thing that is ſower or ſharp taſted.: for remedie whereof, harp warm wine in the mouth with decoction of it, or with milk; eat Almonds, and rub the teeth with kirnels of common Nuts.

Paul. Aegin. l. 6.

Alexand. Trallian. Neapolitan.

Paul. Aegin. ibid.

Chapter XXXI.

¶ Shewing the way to helpe the mouldy, black, hollow, or evill favoured tooth.

The teeth groweth black, mouldy, holloive, and evil favoured, either by rotten humors fallen from the braine, vapours ascending from the stomack, by receiving the fume or vapour of quick-silver, sleeping with open mouth, or by not cleansing the mouth, tongue, teeth, halfe, and breast; in the morning, by spitting out of that which was collected in the night: For remedy wherof, you shall with a proper instrument of iron, rase and rub away such scurffe, mouldinesse and filth which is about the teeth, thereafter wash the mouth and teeth withm with wine wherein hath been boyled red Roses and Marrubium, then dry them wel with a cloth: then to make them white, you must use sharp drying things which have a virtue detersive, for the which I douse the oyle of Vitreoll, Sulphure, strong water which the gold smiths do use, wet a little stick like a Goose-quil in either of those liquors, and rub the teeth therwith twice or thrice, and they will become white, beware in touching the flesh about the roots of the teeth, for these liquors doe corrode the flesh: this being done, rub them with Rose-water, the roots of Aristolochia rotunda, or Althea: if you like rather other remedies than chimical oyles, use either of these following: Take the roots of Aristolochia rotunda, and burn it with a little Harts-horn, Mastick, Salt, and some honey, wrap them within Sage-leaves, and burne them to ashes, put all in fine powder and rub the teeth therwith, otherwise take white Corall, Marble and burnt Salt, of each 2 drams, Cloves 1 dram, make of these a fine powder to rub the teeth. Of this, take the bone of Fish, Harts-horn and Barley flower, of each 3 drams, Isop, Aristolochia, of each 2 drams, shells of Oysters and Egs burnt, of each 1 dram, put these in fine powder, and use

Cure.

Compound

Liquors to make white teeth

Aroſe de a gratid dant

Pal. 3 exp 26

use as the former, or this which I doe ever use: Take white bread, Coxall, Harts-horne, of each one dimid. unc. allom 1 dram, Sage, and Roses of each one halfe a handfull, Oyster and Egge shelles, of each one, two handfuls: put all in fine powder, and use it for the teeth: or this, Take two ounces of the powder made of cannall, cloves and mace, of each one dim. drag. Calaminth, Aromaticke, coxe of Cytron, and yrons of Florens, of each two scruple: incorporate all with fine honey and vinegar, and make a past in forme of an Oppiate to rubbe the teeth morninge and evening, then wash the teeth with claret wine, and rub them with a peice of fine Scarlet that hath beene dyed in graine, and wet in Vinegar Squiliticke, or this, *Rec. Corallorum, Rubrorum, Bole Armenici, Thuris, Margaritarum, Sanguis Draconis, Corticis Cancrorum, ana pugil. 1. Misce & fiat pulvis.* Or this, *Rec. Corallorum Rubrorum, Ossium Dactylorum, Pumicis, Ossium cepiæ, salis usti; ana, quantum sufficit:* or this, which was used by Messilina Augusta, prescribed by Scribonius Largus. *Rec. Cornuum Cervi usturum in olla novam ad cinerem redactorum, unc. 1: Masticis, unc. 1. Salis Armoniaci, 6. Drach. Fiat Pulvis:* Also this Lavement which comforteth the Brains, fortifieth the teeth, and maketh the mouth smell well; first you shall wash the mouth with Vinegar, or Wine, wherein hath bene boyled Annisseedes and Cloves, then rub the teeth with the leaves of Sage, shell the skins of Citron, and make a subtle powder of Cloves, Nutmegs, and juice of Florens and rub the teeth: or this, which is most good for comforting the head, making the breath swet, purgeth the gums, and rootes of the teeth, take Vinegar, Squiliticke, well water, or fountaine water, dim. English pint, Rose water, Saffiche, Bol armenici, Dragon blood, and burnt Allom, of each dim. ounce, Cynamon, 4 dram. mixe and boyle all at one soking fire, a quarter of an houre, adding thereunto 4 ounces of purified honey, make a decoction to rubbe and wash the gummes before and after meate: the Vinegar Squili-

the Authors medicine

Fumanellus.

Bairus.

Messilina Augusta.

Squiliticke is good for the teeth and gums, it hath a mightie vertue to comfort the teeth, and tye the gummes: sometime there happeneth holes in the teeth without pain, and yet unseemly, being commonly blacke and filled with filth, which maketh evill smell: for remedy whereof, you shall take burnt Allom, Myrrh, and Mastick, of each dimidrag. incorporate all with white Virgin wax, and fill up the hole, or corroded part, the which you may take out, or put in at your pleasure. Those be the most common remedies which I have ordinarily used and seene practised, soit may suffice in this place, byreason I am to entreate further in my Booke of the Instantment; besides, there be infinite good remedies set downe for this purpose by Victus Rudolctius, Alexis Bairus, Fumanellus, and divers others, whose helpes the skilfull Chyrurgion may use.

Chapter XXXII.

¶ Of the superfluous flesh, which happeneth at the root of the teeth, called *Epaulis* and *Paraulis*.

Definition. *Paulus 6 ca 17 Bacca lib 2. de Consen. Med*

Epaulis, is thought by our Ancients to be a tumor, or excrescence of flesh, that cõmeth at the roots of the teth, chiefly betweene the Molares, it doth augment by little and little, and augmenteth sometimes to the bignesse of a hens egge, accompanied with fever and dolour: the cause proceedeth, of a sanguine, cholericke, or a sharpe biting humor, which commeth from the head, also evill rotten vapours ascending from the stomacke, and corrodes the Gummes as happeneth after rotten fevers, or evill ulcers in the mouth chiefly, of such, who have not beene well cured of the French sickenesse.

Cause.

Signes. The Signes are manifest to the sight, accompanied with

with ſever and dolour, as ſaith Avicen.

The Judgements. It groweth to ſuch greatneſſe, that oftentimes it putteth the teeth out of their owne place, ſometimes it poſſeſſeth both the jawes in ſuch ſort, that the ſicke can neither open nor cloſe his mouth, ſometimes it is dolorous, blacke, hard, and skirrous, and in that caſe you muſt beware to irritate, or uſe cauſticke remedies, but onely medicaments, refrigeratives, deſiccatives, and mittigatives of paine, as you have heard in the Chapter of Schirre. Judgements. *Paulus lib. 6. cap. 27.*

The Cure conſiſteth firſt in the evacuation of the evill, ſharpe and rotten humor, then uſe deſiccatives, and diſcutients, in the which if you profit not, you muſt apply cauſticke powders too, to conſume the ſuperfluous fleſh: If it neither diſſolve, nor can be conſumed with powders, you ſhall uſe inciſion if the excreſcence be ſoft and tractable, cut away the moſt part of it, and conſume the reſt of it with powders, and produce the cicatrice with ſuch gargariſis as you ſhall heare in the Chapter of Ulcers in the mouth: if it be very bigge, and may not be taken away at the roote, yee ſhall knit the excreſcence with a ſtrong thread, then tye it faſter and faſter every day, untill ſuch time it be cut, and fall away of it ſelfe. I have found this Ligature more, ſure then cutting, neither ſo much to be feared, for flux of blood, or inflammation: that which doth remaine after the fall of the thread, you ſhall conſume with powder of Mercurie, allom, Uitreoll, and ſuch like: If it be reſidue, as oft happeneth, you ſhall knit it at the roote as before, and canterize it with actuall canter, oyle of Uitreoll water of ſeparation uſed by the Gold-ſmithes, and ſuch others of that nature. As touching Paraulis, it is an inflammation in ſome part of the gummes: for the which you muſt uſe diſcutients, and if it diſſolve not, but commeth to ſuppuration, it muſt be opened with diligence, for feare the gummes be corrupt, which if it ſo happen, touch the corrupt part gently with oyle of Uitreol, or ſtrong wa- Cure. *Aloue. lib 2. cap 28.* *Paraulis. Actius ſerm 2. cap. 14. Gal 6. de comp. m d cap. 1. Avicen. lib 2. cap. 1.*

ter. The form of the opening must be with a Bistory curb, making the overture reasonable bigg, thereafter wash the mouth with Claret wine, wherein hath been sodden Parrubium, then stay the flux of blood by such means as you hav heard in the Chapter of corrupt Teeth, cleansed with hony of Roses, strong wine, and Sarcacolla, use Gargarises, Detersives, add Desiccatives, as you shal hear in the next Chapter.

Chapter XXXIII.

¶ Of Pustules and Ulcers in the mouth.

Definition. *Gal. 6. Meth. cap. 4.*

Those Pustules and Ulcers which oftentimes possesse the upper part of the mouth and gums, are named by the Greeks *Aphe* and by Avicen *Altolla*, in vulgar the Water Canker, and are of a white fiery quality, for the most part incident to young Children, sometime to those of elder age.

Cause. *Galen loco citato.* *Avicen tertia fen. cap. 23*

They doe proceed either of corruption or acrimonie of the milk which the child cannot digest; Also by corruption of humors in the Nurse. It happeneth to those of elder age, through abundance of vitious corrupt humors which flow to the mouth; also by the acrimonie and bitternesse of the nourishment which we eate and drink.

Signes. *Aetius ser. 8 cap. 39* Judgements. *Paul. 1. cap. 10*

The Signes are evident to the sight, and are known by the colour. Those which doe proceed of blood, the colour is red, hot, the part tumified; if it proceed of Flegm, the colour is white, with little dolour; if of choller, it is yawnish coloured, with som tumor, punaton, and heat; if of melancholie, the colour appeareth blackish, which is worst of all: thos which be black and scurffie like the crust of bread, it sheweth great corruption and adustion of humors, very dangerous, and for the most part deadly: those which be red or white, are not malignant: such as are superficial, are easily cured, those which penitrat more profunditie, are difficile.

The

The Cure conſiſteth in evacuating the evill humors which is the cauſe, then preſcribe a diyet to the Nurſe that is colde and humide, to correct the acrimonie of the milke, cauſing her to uſe ſuch things as the childe cannot take, which ſhall be done by the advice of the skillfull Phyſition, rub the childes mouth with juice of Lettice: If thoſe Ulcers be very humide, take Myrrhe, nutgals, the barke of Incenſe, bruiſe all well together with a little redde Roſes, and annoynt thoſe Ulcers: or elſe waſh them with Wine, and a little powder of Galls, barke of Granads, and a little Allom: If the Ulcers be white, take Myrrhe and Saffron, of each one drag. white Succorie two drag. beate all and apply on the Ulcers: If the Ulcere be blacke, touch them with a little Roſe-water, wherein hath bene diſſolved a little Eye-Copris, called *Calcanthum*: for theſe Ulcers I doe commonly uſe a Lavement which is made of Sage, Iſop, Woodbine, Pimpernell, *Burſa Paſtoris*, and Myrrhe leaves of each halfe a handfull, boyle all in running water, adding thereto honey of Roſes, and boyle it till halfe be conſumed, putting thereto a little Diamorzon, waſh and robbe the childes mouth twice or thrice a day therewith. I doe alſo uſe ſometime for this purpoſe Plantine water, Sirupe of Roſes, with a little Romaine Vitreoll, and annoynt the Ulcers gently therewith, with a ſmall linnen cloth, or a peice of Scarlet, twice or thrice a day, with ſuch other remedies as you ſhall heare in my Booke of Young Children.

Cure.

Lemnil. Favon. de medendis morbis.

Meſues de egritud. Oris.

Eye-Copris Calcanthum

The Authors mouth Water

Another of the Authors

As for the Cure of thoſe in elder age, after purgation be uſed according to the humor which demaines, you muſt let blood in the cephalicke vaine, thoſe of the tongue and under the lips, Ventoſes on the ſhoulders, and Gargariſes, ſuch as this, take an handfull of Barbarie, Plantine, *Burſa Paſtoris*, Roſes, Violet, Chesbow, of each a certaine quantitie, boyle all in water till the halfe be conſumed, add to it honey of roſes, or ſirupe of roſes, with a little allom. If there be putrefaction, ad a little *Calcanthum*, or *Ægyptiack*, otherwiſe, uſe

Cure.

a gargarisme for ſhilre frogle

Another

uſe this, Take decoction of Barley, Pimpernell, Plantane, Agrimonie, or Roſes, of each foure ounces, make a decoction, in the which you ſhall diſſolve honie of Roſes, and Diamoron, of each half an unc. waſh the Mouth and Ulcers therewith: the Ulcers then being ſo cleanſed, waſh them with ſtilled water, Plantane, or ſome Roſe water, and Allom mingled together, with thoſe waſh the Mouth twice or thrice a day by which meanes they will cicatrice and heale.

¶ Of the deſeaſes and paſsions which befal the Tongue.

Definition.

Conſtantine.

Gal. lib. 11. de uſu partium.

Glen 4 de ſum.

The Tongue, which is called by the Grækes *Glotta*, in Latine *Lingua*, is the inſtrument of ſpeaking and taſting, as ſayth Conſtantine, It is compoſed of an hollow and ſpungious fleſh, to the end the ſavour & ſmell may paſſe and come the eaſier to the nerves, which make the taſte. It hath divers nerves for feeling and moving with divers vaines and artiers full of blood, for which it is red coloured, and ſerveth for divers uſes: as alſo ſubiect to divers paſſions, as Tumors, inflamation, Ulcers, Apoſthumes. Pvrites, difficultie of ſpeech, called *Difficultas loquendi* by the Latines, and by the Grækes *Mogilales*, liſping in ſpech, called by the Latines *Bleſitas* and by the Grækes *Traulon*, which is when one cannot pronounce certains Letters in ſpeaking, as R. and L. Panting called by the Latines *Balbuties*, and by the Grækes *Pſellos* which is, when one cannot pronounce the words, except they omit ſome ſyllables. *Haſitantia linguæ* called *Iſſenophania* in Græke, is when one cannot conſoyne and aſſemble the words together: as for *Ranula*, you ſhall heare in the next Chapter; Ulcers you have heard: as for the Cure of the reſt you ſhall heare in the Treatiſe intituled The poor mans Guide. Heare I am onely mindfull to ſpeake of thoſe two which are moſt common and difficile to be ſuffered, to wit, the retraction or ſhortning of

of the tongue called the *Phylis*, and the tumor or excreſcence under the roote of the tongue called *Ranunculus*. The retra-ction or tying of the tongue, called by the Latines *Ligatio* or *Abbreviatio linguæ*, and by the Græckes *Ankyloglossa*, is when the ligament membranous of the tongue is ſhorter then it ſhould be, either impeding the ſpæch or pronunciation; the which happeneth by nature or by accident. By Nature as we ſæ in young children; by accident as happeneth in wounds ulcers, or hard Ciccatrices, in thoſe parts: that which happeneth by nature, divers learned men have diverſly practiſed for the help thereof; amongſt the which Avicen is of opinion to paſſe the nædle and a ſtrong thread, under the ſinowe or ligatour membranous or hard ciccatrice, then tye it harder every day till it fall off it ſelf, as you have heard in the Chapter of *Paralis*, Langfrancus counſaileth to cauterize it with an actuall cauter, which opinion hath bæne followed by ſome. Although I doe not approve it, but have ever followed the opinion of Albucaſis, which is firſt to ſcituate the childe commodiouſly, then cauſe one to holde open his mouth lifting up his tongue, with the finger of your left hand, then cauſe one to holde his finger by the other ſide or roote of the tongue, ſo you ſhall ſæ perfectly the ligament, then with your Biſtorie, or ſharpe Shiſſers make your inciſion overthwart the ligament membranous, in ſuch ſort, that the tongue be made fræ to move voluntarily, then rubbe it gently with a little Roſe water every day twice or thrice as ſhall be expedient, paſſe your finger ſoftly upon the wound with a little honey or ſirupe of dzie Roſes, that it grow not together againe: if your retraction proceæde of ſiccatrice, make your inciſion more large, and conſume the hardneſſe of the ſiccatrice, then hold a roll of fine ſmall cloath faſt in the wound for certaine dayes, the which may be wet in honey or ſirupe of Roſe, that it doe not conſolidate over ſoon: if there happen flux of blood, as I have often ſæne, you ſhall uſe ſuch remedies as is ſet downe in the Chapter of corrupt Lith.

Paul. lib 6. cap. 29.

Celſ. li 7 ca. 12

Avicen.

Langf. ancus.

Alb. li 2 ca 34.

CHAP-

Chapter XXXV.

¶ Of the tumor under the tongue, called *Batrachus* in Greek, and *Ranunculus* in Latine.

Definition. *Paulus lib. 3. cap. 26. Albuc. lib. 2. cap. 35. Aetius ſerm 8 cap. 37. Avicen.*

RAnunculus is a tumor on the vaines under the tongue, or an excreſcence of fleſh which impedeth the naturall operation of the ſpeech: it groweth ſometime to ſuch bigneſſe that you would think it another tongue, it happeth to young Children, as alſo to thoſe of elder age, in ſuch ſort, that the voyce ſometime intercepteth. The Cauſe of theſe tumors is a ſlimie pituitous, and viſcous humor, diſcending from the head: ſometime it is no humor, but excreſcence of fleſh, cauſed as other excreſcenſes in other parts, the humor is for the moſt parts involved in a bagg or cheſt, like Atheroma, the which is both in colour and conſiſtence like the white of an egg.

Cauſe. *Paulus lib. 3. Ibid. Avicen. tertia tertii, cap. 17.*

Signes. *Avicen loco citato*

The Signes are evident, and for the moſt part it is both in colour and figure like unto a Frogg, called Rana, whereof it taketh the Name: it is accompanied with great tumor, chiefly of the Veines under the tongue.

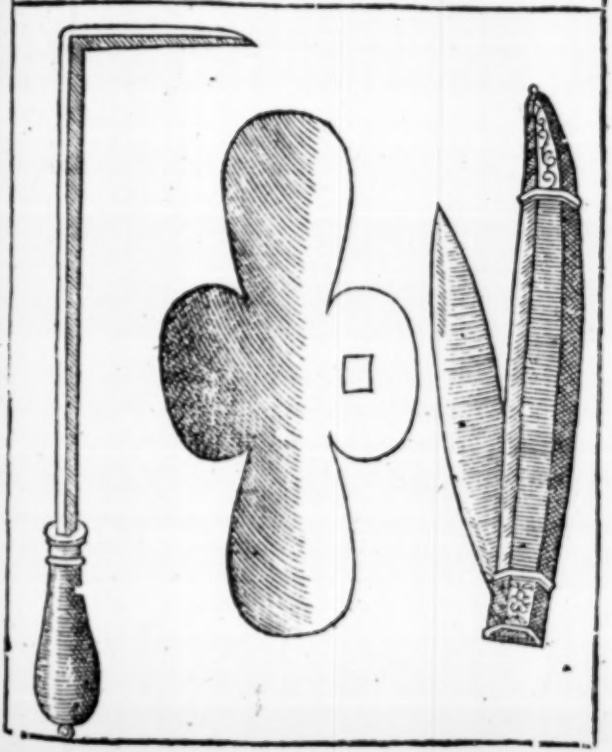
Judgement. *Alsin. loco citato. Vranus lib. 2. cap. 3. Rasis de morb part li 2. ca 37 Trall 6. de dec va Avicen ſexta tertii, cap. 18. Aetius loco citato.*

The Judgements. It is ſometimes ſo big, that the mouth cannot containe it with the tongue, in ſuch ſort, that if haſtie remedy be not had, the ſick doth ſuffocate, and ſometime in opening of it, the ſick becommeth mad: if it be black, brownish, hard, and inſenſible, touch it not, for it is cancrous.

The Cure, firſt conſiſteth in purging the head, and if it happen in young Children, you muſt firſt aſſay Gargariſms reſolatives, inciſives, and ſiptickes, like as of Oxycanum, barke of the Granad dragagant, ex uſtum, and ſuch like alſo rub it long with Sal Armoniac and Galls, or Sal Armoniac, Flore æris, with Dragagant: if by theſe meanes you profit not, you muſt come to the manuall operation, which

which is thus done, first place the sick commodiously, then cause one to stand behind him, and one of his hands upon his forehead, the other on his chin to hold it down, and open the mouth, then the Chyrurgion shall open the veines under the tongue with a Launce, next open the tumor, either by bistorie or cauter actuall. And

Instruments to cauterize and open the ranula vnder the tongue.



Aetius ſerm. 8 cap. 37.

And evacuate the humor by degrees: next rub gently the ſore with vinegar and hony, or wine and hony, cleanſe it with gargariſes made of decoction of Barley, Roſes, Plantine and Hony, or ſtrop of Roſes, as afteires: if any thing remain either of humor or bag, you ſhall conſume it with Sal Armoniacke, Floris, and other Corroſives: ſomtimes the tumor is ſo malignant that oftentimes we are conſtreined to apply actuall cauters or tents, and plumations, wet in oyle of Vitreoll, or correcting the malignitie, and impalling it to be reſidue, as ſomtime happeneth, yet not often, becauſe the diſeaſe is not common. I have ſeen of this diſeaſe for this thirty yeer, in parts where I have travelled: in applying the actuall cauter, you muſt have a peece of white yron or ſilver to put under the tongue, made purpoſely and commodiouſly for that part, with a hole in the middeſt of it, where the cauter or hot iron ſhal paſſe, by which means you ſhal ſave the parts adjacent from the cauter, thereafter produce the fall of the Scharre, and cicatrize the wound, as in others you have heard.

Alphon ſorea in Neapolitanus lib de ligna ſanctæ.

Chapter XXXVI.

¶ Of the Inflamation and relaxation of the *Uvula*, or *Columella*.

Gal 6. de comp med per loca. cap 3.

Rhaſis meth. curan. morb.

Nature hath placed and hung in the roofe of the mouth, a peece of ſpongious fleſh named by the Greeke, Gargarion, and by the Latines, Gurguleo, in vulgar the pape or chap of the mouth: the which being augmented, and lengthened above Nature, through diſtillation of humors, it is caled Schion in Greek, and in Latine Columella, and *Uva*, for it being tumified in length, it is like a pillar, or collume, ſomtime the nether part of it is round, and then it is called *Uva*, through the ſimilitud it hath with the black vine berrie: it is placed in the roofe of the mouth for divers

bers reasons: First, it helpeth to pronounce the sound, and to speak cleer by dividing of the ayre which cometh from the lights, for the which it is called *Plectrum vocis*: Also that the ayre which cometh by the Mouth and Nose, entreth not in the lights by the Trahe-Arterie, till the coldnesse of it be corrected, so that the lights be not offended by cold. Such as want the pappe or pellet, hath ordinarily deformitie in speech, with refragoration of the laines: it doth impesh that neither dust nor rhume enter in the trahe arterie with the ayre. *Brunus lib 7.*

The Cause is either external or internall: The Internall are hot humors which come from the head and cause inflamation, also vapours ascending from the stomack, as happeneth in rotten feavers, also aboundance of blood. The Cause Extern, drinking of strong wine, eating and drinking of bitter and sharp meats cold, hastie excessive eating and drinking at unaccustomed times. Cause. *Aetius serm 8. cap. 40.*

The Signes are evident to the sight, by pressing down of the tongue, accompanied with dolour, feaver, difficulty to swallow the meat. The sick thinketh ever to have something in his mouth readie to go over with great hast by the continuall distilling of the humor, impelling to sleep but with open mouth; Sometime it hangeth so long that it falleth on the tongue, and so grieveth the sick, that sometime he is constrained to put his finger in his mouth to help the forgoing of the meat as saith Avicen Signes. *Aetius serm 8. cap 45. Gal 6. t comp. med cap. 3.*

The Judgements, sometime it groweth to such bignesse that it killeth the throat, and causeth the sick to suffocate, if it be not quickly cut: If it be altogether cut or fall away, the sick altogether waxeth sick, or else speaketh so that he may not be understood, and that drink which he taketh, doth for the most part avoyd at the Nose, as I have often seen. It happened to me at Paris to have a Chanon of Saint Avoy, who had a certain disease in his mouth, by the which he lost the pellet of his mouth, whereby he became dumb, and that drink which he ever drank, he did avoyd Judgements. *Hippo in his Presages.*

the

the moſt part of it at his Noſe. Such as have the pappe or pellet great, long, and tumified, have their voyce ſo broken, that hardly can they be underſtood, or at the leaſt doe ſpeak
Tra. lib. 1. through their Noſe. That which is black, browniſh, inſenſible, and dolorous, may not be touched, for either they become carſanomatous, or great flur of blod enſueth, ſo in that caſe it ſhal be beſt to apply remedies that have the vertues to refreſh and comfort the part, and pacifie the paine.

Cure. The Cure conſiſteth in purgations & Gliſters, blæding of the cephalick vaines, armes and vaines under the tong, ventoſing in the neck & ſhoulders, with ſcarrification, fricions, gargariſes, deterſives, refrigeratives, aſtringents, with good dyet, tending to cold and drie, uſing meats of good digeſtion, abſtaining from al ſtrong drink, waſhing often the mouth with this gargariſe made of Plantane, Barley,
Rol. li. 2. ca 17. *Burſa Paſtoris*, the bark of Pomgranet, ſeeth all in water, and add thereto a little ſirup of Roſes, of Violets, with ſome Gumm of Dragagant, and Sarcacoll; otherwiſe you may only uſe to waſh the mouth with Plantane, Roſe, Iſope water, and a little Vinegar, hold a little of it in your mouth a pretty ſpace. Allom water is alſo good for this purpoſe: Or this powder made of Allom Waluſt, *Terra Sigillata*, red Roſes and Sugar, make all in fine powder, and put in a little Inſtrument formed like a ſpoon, put it in your mouth in ſuch ſort that the pap dip in it and receive the powder. After the ſame form you may take braied Pepper and Salt mixt together. Alſo Salt dried, and put in a
Rondolet de morb cur an. little pocket hot in the hole of the neck, ſome uſe hot bread to put in the hole of the neck.

Celſ li. 6 ca 14 Celſus counſaileth to take a powder made of Allom, *Squamma æris*, Gall, Myrrhe, mixed with a little ſad Claret wine and applie to it: ſometime being tumified, it tendeth to ſuppuration; if ſo, it muſt be opened with a Launcet, and cure it with Gargariſes, as other Ulcers in the
Lonicerus de expli. mor. b. mouth: If by neither of theſe remedies the griefe doth diminiſh and goe away, you muſt hazard either cutting, knitting,

ting, or corrasives to consume it, otherwise the sick doth often times suffocat and die. The best remedie that I have found in this, is, first to place the sicke in some light part, open his mouth, and hold downe his tounge with a *Speculum oris*, thereafter cut a little of it with sharp sheares, then wash the mouth with Drecreate or some astringent water mixed with sad Claret wine, and some astringent powder: if there be flure of blood, stay it by some caustick powder. Some for this purpose do use the ligatour, as you have heard in the Chapter of *Epaulis*, the which is sometime dangerous for great flux of blood: others doe approve actuall cauters which sometimes I have seene used in the great Hospitall of Paris, called Our Ladies Hospitall, but with very evill successe; so by my advise assay it not, in case thereby you incurre rather pain, than profit. I have sometimes cauterized the Uvula with a little oyle of Vitreoll, strong water, or Cauter potentiall, put either of these in a little instrument, and let the end of pellet or Uvula trampe in it: so that which is superfluous shall consume and fall away, then wash your mouth with warme wine or Drecreate, and use Gargarises, as is before mentioned.

Alb li 2 ca 37. Langfrancus. Celf li 7 ca 12.

Chapter XXXVII.

¶ Of the tumor or Aposthume of the Amigdals, called by the Greeks Paryschmia, and by the Latines Tonsillae.

Nature hath placed in the two sides of the Uvula, somewhat behind, two little glandes which are spungious, one on every side to the greatnesse of an almond, for the which they are called Amigdals: their office is, to receive the humiditie which distilled from the braines, to the effect the parts of the mouth may be humected and refreshed: as also the trachea-artery & tongue, in such sort that the tongue in speaking be not over-drie, and empash the pronunciation

Gal 3 simpt. caus. ca 4. & 2 de usu part. & alb 26. lib 3.

Cauſe.

Rc. li. 2 ca. 15. Gal 6 de comp. med per loca. cap. 3.

The Cauſe, is great abondance of viſcous ſharp humiditie which commeth from the head, alſo drinking of ſtrong and fumide drink, walking abroad morning and evening when the deaw falleth, great abondance of blood: it happeneth ſometimes to Children through the bitterneſſe of milk.

Signes. Judgements. Avicen nona 2 pt 1 cap. 5 Alo li 2. ca 36

The Signes, are evident to the ſight, in preſſing down of the tongue. The Judgements, are dolour, feaver, accompanied with ſuch inflammation, that ſometimes it ſtoppeth the paſſages of the meat and drink, as alſo the reſpiration: ſo that the ſick can neither let over the meat, nor reſpire, but doth ſuffocate, if haſtie remedie be not had, as ſaith *Albucaſis*.

Signes. Actius Serm 8 cap. 45. Rou. in lib. curand morb. Celſ li 6 ca 13. Pa li 6 ca 30. Hip pro 3. caſ. 6 text. 12. meines de a. grund guttur.

The Cure, conſiſteth in good diet, eating little, & of good digeſtion, abſtain from all ſtrong drink, uſe Oliſters, blaving the arme and vains under the tongue, ventoſes, frictions on the neck and ſhoulders, gargariſes, refrigeratives, and deſiccatives: If it apoſtumate as often happeneth, it muſt be opened with a Launcet, if the tumor doth ſo augment that the ſick be in danger to ſuffocate, you ſhall make incision in the trache-artery, after this form; lay the ſick on his back, thereafter lift up the skinn of the trache-artery, with thy hand, and cut it in length till the membrain be diſcovered, then make your incision with a biſtorie in the ſaid place, thereafter put in an hollow tent of ſilver, gold, or lead, with a broad head well ſight, that it goe not to the lyghts: after the danger of ſuffocation be paſt, uſe ſirrups of honey and Roſes to cleanſ the wound, take out the tent and conglutinate the wound, and in all this time uſe externall medicaments about the neck made of Barley-flower, Lyn-ſeed, and Fenegreek, with ſuch other things meet, according to the degree of the maladie: In this caſe I doe often uſe this remedie, which hath the vertue to cloſe the ſoft parts, and dry up the humor pituitous which is fallen on the part, and hath the vertue to ſoften the glands intern, and is thus made, *Rec. Nidi hirundinis nuc. 3 pulveris nucum cupreſſ nuc.*

Rund de cura. morb.

unc. 1 *Roſarum unc.* 1 *ſemi. accipiantur cum eximellite fiat cataplaſma.* This inciſion is very dangerous, not being rightly done, by reaſon of the fluxe of blood, which often happeneth: Likewiſe for the nerves which paſſeth that way. I cured an Apothecarie in Paris after this manner: ſome doe uſe to knit theſe glands, as you have heard in the chapter of *Epaulis*: others doe conſume them by actuall cauters, others pull them away by Croſſets and other inſtruments, either all whole or by peeces, which from *Albucaſis* alledged to have done to an old man, who had almoſt ſuffocated, but of the event of the cure he maketh no mention: ſomtime the tumor is malignant, which ſhall be known by the harones, lividitie, dolour, inequalitie, greatnes at the root, of the nature of *Cancer*, which muſt not be touched, but uſe remedies palliatives, as you have heard in the Chapter of *Cancer*.

Trall fol. 177.

Pa. li. 6. ca. 39.

Alb li. 2. ca. 36.

Signes.

CHAPTER XXXVIII.

¶ Of the tumor in the throat, called by the Greeks *Synanche*, and by the Latines *Angina*, or *Strangulatio*.

Definition.

THere chanceth in the throat many greivous ſickneſſes, but here only I minde to ſpeak of that which is moſt dangerous, called *Angina*, which is an apoſtume or inflamation of the interior muſcles of the throat, whereof there are four kinds. The firſt, is great inflammation in the throat. The ſecond, is an humor contained behind the Amigdale, which ſometime doe hinder the ſwallowing of the meat, and oftentimes doth ſuffocate the ſick. The third, is great tumor and inflamation towards the chinn, both externally and internally. The fourth kinde is, when the vertebries of the neck goeth out of their own place, whereupon the tongue removes from the proper ſcituation with great difficultie to breathing. The cauſe of it, is either

Hip prog. & comp. 34.
Pa li. 3 cap 17.
Roi li 3 ca. 15.
Difference.
Gord. par. 4. cap. 1.
Ætius Serm 8. cap 47
Trallian. lib 4. ca 1.
Gal aph 4 ex. 34 & li 2. epi. ſect 1.
Cauſe.

cold ayre, usage of cold drink, with abundance of cold weak humors and vapours, not only of all the whole body, but of the head and parts nèer to it. The Signes, are difficultie of breathing, fever, heat, inflammation, and dolour in the throat. The Judgements are these, if it come suddainly through a fever, without any outward appearance, in the neck, it is mortall. This happeneth seldome to young children, except when the vertebres of the neck goe out of their place, and then they receive no cure. The Cure consisteth in Generall and Particular remedies. The Generall, shall be in good forme of life in the six unnaturall things, eat and sleep little, and drink only Tysan, use oft Glisters, and purgations, pilles, bleed in the vain Cephalick in both the armes, as also those under the tongue. The Particular remedies are frictions, ventoses, with scarrification on the shoulders, with application of hot bread on the neck to divert the humor, with this liniment (to rub on the neck) made of unguent refrigerant *Galeni*, oyl of Cammomill, Violets, and Lillies, with a little hens grease, thereafter apply sheeps wooll as it comes from the sheep. Gargarize the mouth with Plantine water, Vinegar, and Whey; or with this which followeth made of Barley, Pimpernell, Carvell, of each a little, seeth all together; and after the ebulition put to *Diamoron*, and honey of Roses, *Alexis* alledged to have cured at only in three hours, by applying one pound of *Aquæ Scabiosæ*, with an unc. of *Aquæ vitæ* mixed together. *Paulus* and *Mesues* have ordained divers remedies for this purpose: also this Gargarism is good. *Rec. Aquæ solani, Plantaginis, capillor. an. lib. semi. Diamoron unc. 3 fiat gargarisa.* If the humor turn to suppuration, use this gargarism, take the roots of Mallowes, Althea, Sorrell, and Lyn-seed, of each one a little, boyle all in Cowes milk, putting thereto a little of the mucilages of Psylion, which you shall hold a certain space in your mouth warm. The matter then being come to maturitie, open it with a Launcet, then use this

Paul li 3. ca. 17 Gal. 4 loc. 4 & 35. Mesues de æg. i ud. gutt.

Signes.

Judgement.

Hip. prognost. Paul li. cita. & 4 de morb. acutis text. 30. Avicen doct. tertii cap 9 Gal. 3. prædict. com. 16.

Cure.

Mesues de ægr. haud gutt. Rol. li 2 ca 15. Rol. lib. 1 cap 45. Trallianus ibi Hipp. 4 devict. rationem acut. Paul loco citat Gual. 6 uct. praxis medi.

Paulus ibid Rasis de medic. curand. morb.

Avicen doct. tertii. cap 10.

this cleansing gargarism made of decoction of barly, hony, and sirup of Roses, for a certain space, holding it alwaies warme in your mouth: it being cleansed, you shall add to the foresaid decoction a little allom, balust, and myrrhe: thereafter siccatrize the wound, remembring all this time to keep good diet, abstain from women, and take good heed the matter take not course to the loynes, which is most dangerous. If it happen at any time that either a little bone, or any other like thing fall in the throat, you shall hold your mouth close together, & pluck up cold water at the nose, till such time it avoid at the mouth. By this remedy I have seen sundry helped, who have been troubled chiefly with fish bones: and further he may take advice with *Albucas. lib. 2. cap. 38. & Paul. l. 6. c. 32.*

Antoni. musa cap. de sinant.

Celsl. 4 ca. 4.

Jubertus de pilorum affect.

Chapter XXXIX.

Of the tumor in the Neck, called by the Latines Struma or Scrophulæ.

Struma is an inflamation of blood and pituite in the soft and glandulous parts, as under the jawes, armes, at the roots of the thighes, and in the paps. It is engendered of a rotten thick matter, and congealed blood. The Cause is falls, strokes, or humos pituitous, mixed with melancholie: also drinking of evill waters, whereof I saw many infected at the siege of *Paris*: also by retention of the excrements of the braines, which should avoyd by the mouth nose, eares and eyes. This disease often happeneth to young children, through their great gulositie and raritie of the skin, for the which some call them *Scrophulæ*, by the similitude of a greedy Beast, called *Scrofa*. The signes are apparent to the sight: they are sometime few in number, otherwhiles many, and are covered with a membrane like *Atheroma* and *Steatoma*. The Judgements, those which are superficiall, mobile, and few in number, may resolve:

Definition. *Paul li 6 ca 35 & li 4 ca. 22. Rol. lib. 2 ca 12 Gal. 14 meth. Celsl li 5 ca. 28*

Cause. *Vigo ca. de tumor pituito. Theodori. lib 2. Gord. part. 1. cap 85.*

Signes *Arnald lib. 2. Servilii ca 5.*

Judgement. *Alpho de lignamine lib. 2.*

Berta Pallia.

ſuch are ſtable, hard, and maligne, doe not reſolve, or hardly receive any cure: ſuch as are great and nære the tracheæ arteri, are difficult in opening, by reaſon of the nerves recurrents, which being cut, the ſicke either wareth dumbe or becommeth hoarſe like one that hath the cold: they are alſo difficile, being accompanied within vaines, for feare of fluxe of blood.

Cure.

Scribonius Largus de compo. med. Adamus Lonicerius de expl. morb Avicen.

The Cure conſiſteth in remedies univerſals, & particulars, as in good regiment, eate little and of light digeſtion, and abſtaine from ſuch things as engender groſſe humors, purge often, bleed in both thy armes, and haunt bote places, thy drinke ſhall be compoſed after this forme: Take *Scrophularia* 3 parts, *Philopendula* 2. parts, *Philoſella* and *Braſſica* of each a little: the rootes of Reddiſh and *Ariſtolochia* a little, ſeeth them all in white wine, with a little honey, till it be halfe conſumed, of this you ſhall uſe 2. ounces in the morning, every two dayes once. I have uſed to divers a decoction Laxative the ſpace of 15. or 20. dayes: otherwiſe my confection ſet downe in the Poore mans Guide, whereof I found great helpe. The particular remedies are to annoynt the part with a little ſalt butter, fried in a pan with a little Vinegar till it grow black: ſome uſe the plaſter of *Vigo* with Mercurie. *Brunus* and *Theodericus* approve much plaiſter made of Ammoniacke, and *Bdellium* reſolved in Vinegar. *Lebet* commendeth *Diaſcordium Magiſtrale*, and *Divinum*, mixed with quadruple Mercurie. I commonly uſe that cataplaſme ſet downe in the chapter of *Parotidum*. If it tend to ſuppuration you ſhall uſe this, take the leaves and rootes of Mallowes, Lilies, Reddiſh, Cucumbricks, Agroſtis, of each 2 ounces, leaves of Camomill one handfull, and make a decoction, whereunto you ſhall adde the flower of Beanes, Linſeed, and Fenegreke an ounce, Swines greaſe that is freſh a pound, make a cataplaſme, adde unto it a little oyle of Iris, and Lilies. This remedie hath the vertue both to digeſt and ripen: when it is opened, cure it as you have heard in others.

Brunus. Theodoric. Rundolet de curan morb.

Scribon. Largus de compo medica Ad lu 2 cap 42.

Some

Some old and new Phyſicioners in the cure of this, doe cut away all the glands, taking heed of the nerves recurrent, which ſerve to the voice: ſometime children having ſcabs in their heads, the braines humid by wrong lying and taking cold in the night, have the glands tumified. For remedie whereof, apply oyl of Camomill, Anniſeeds, and ſweet Almonds, with a little Hennes greaſe and butter. If the tumor be hot, add to it oyl of Roſes, and Violets: alſo rub it with faſting ſpittle till it grow hot. This diſeaſe is called the Kings Evill, which is alledged by Frenchmen to be cured by their King after this ſorm; the diſeaſed firſt is viewed by the Chyrurgions, who finds it to be the kirnells of Kings Evill, then the diſeaſed is ſet on his knees, and preſented to the King, who maketh a croſſe on his forehead with his hand, ſaying, *Le Roy te touche, Dieu te garrie*, which is to ſay, the King doth touch thee, God make thee whole.

Rol li. 2 ca. 12.

Kings Evill.

CHAPTER XL.

¶ Of the tumor in the neck or cragg, called *Broncocele*, or *Hernia Gutturoſa*.

This tumor, which the Græcks call *Broncon*, and the Latines *Hernia gutturis*, and the Arabians *Botium*, is round and great, ingendered of the humor phlegmatique, betwixt the trache-artery and the skinn: ſometime it occupieth the moſt part of the crag, of the which there are divers kinds according to the matter contained therein, ſometime like *Atheroma*, otherwhiles like *Aneuriſma*.

Definition.
Paul li 6 ca. 33
Rol li 2 ca. 14.
Lunicenus de morb expl.
Rol li. 2. ca 14.

The Cauſe is not different from theſe that it is like unto, yet ſome are exernall, and ſome internall, proceeding of a cold and humid ayre, drinking of evill water, as thoſe who dwel in *Pimount*, and about the Alpes are much ſubject, becauſe the moſt part of their drink is melted ſnow: it happeneth alſo by the retention of monethly courſes in women, and Hemorrhoides in men, with great repletion of the me-

Cauſe.
Chelmetens. cach. Chir. Arnald lib 2. breviar. cap. 4.

Signes. lancholique humor in both ſores. The Signes are moſt evident to the ſight.

Judgements. *Paul li 6 cap de hernia gutter. Alb li 2 ca 44 Theodor. lib. 3 cap. 31.* The Judgements, thoſe that come by nature are incurable, and thoſe which are like unto *Aneuriſma* muſt not be touched, ſuch as are very great accompanied with great vains, are very dangerous, and in no wiſe to be touched, thoſe which be tractable muſt be opened by cauter or launcet, eſchewing alwaies the vains.

Cure. The Cure is, firſt to corroborate the head with powder cephaliques, thereafter apply unto the ſore a cake of lead rubbed with quick-ſilver, or the emplaſter *de vigo* with Mercurie, rubb it with thy hand till it grow red, before the application of the plaiſter, and uſe ſuch things as do provoke ſpitting, for the which it ſhall be expedient to uſe five or ſire graines of my Arabick powder, hold thy belli laſ and *Brn li 2 ca. 7* keep good dyet, bleed in both the armes, if the malady, intemperature of the perſon require. That kind of it which is like unto *Atheroma*, may be cured as you have heard in that Chapter. As for the other kinds of it, if that avayle not, you ſhall have recourſe to my Book of the diſeaſe of Women, by reaſon oftentimes it happeneth to them in time of their travailing, by ſtopping of them to cry in the time of their extream pain, the which Book God willing ſhortly ſhall come to light.

Chapter XLI.

¶ Of the tumor called *Aneuriſma*.

Definition. *Gal. lib. tum. præternatur.* *Aneuriſma* is a tumor ſoft to touch, the which is engendered of blood and ſpirit under the skin and muſcles, which happeneth in divers parts of the body, chiefly in the ſides of the crag.

Cauſe. *Paul li. 6 ca 37* The Cauſe is either dilitation, inciſion, or ruption of the artery, which often chanceth to Women in the time of their birth, to Trumpetters, Criers, Watermen, and others, who uſe violent labour, and great crying,

or

or other violence, by the which ſome of the artery doth dilate.

Signes. The Signes, are tumor, impreſſing on with the finger, great pulſation. The tumor is of the ſame colour, as the reſt of the skinn, ſoft to touch, yeilding to the finger, by reaſon the blood and ſpirit retyreth unto the arteries and parts adjacent, and having removed the finger, it preſently returneth with a noiſe or bruite, by reaſon of the blood and ſpirit that returneth. *Adamus Leni. de expli. morb.*

This happeneth when the *Aneuriſme* is done by anaſtomies, that is, the artery be opened and cut: When the artery is riven, as happeneth to women, and thoſe of great exercise, there iſſueth forth more abundance of blood then ſpirit, and is more hard than the other, and maketh leſſe noiſe in the retyring. *Gal. lib. tumor præternatur. cap. 11.*

Judgements. Thoſe which are ſuperficiall in the exterior parts, as the head, legs, and armes, may be knit, and are curable: thoſe which are profound and interior, in the breaſt, as often happeneth to thoſe who ſweat exceſſively of the venerian ſickneſſe, and otherwiſe: alſo thoſe in the neck under the armes and roots of the thighes, and when there is great dilatation of the arteries, are not curable, but death enſueth within few dayes, or at the leaſt are very perilous, as ſaith *Paulus*: and if the tumor be opened, the patient dyeth preſently. *Paul. li. 6 ca. 37.*

This happeneth oftentimes by the unskilfulnes of ignorant Barbors and other abuſers, who meddle with this art, who ruyne a number of People through their ignorance, as I have often ſeen: ſuch ignorants doe eſteem all tumors that are ſoft, ſhould be opened as common Apoſtumes.

I remember in Paris in Anno 1590. there happened ſuch a diſeaſe to a valiant Captain (my great friend Captain Joyle, who was one of the chiefeſt Captaines amongſt the Spaniards at Paris) on the right ſide of his cragg, for the which, I a Chyrurgion Major to the regiment, was ſent for, and found it to be an *Aneuriſme*, ſo not to bee touched; of the which opinion was my good friend

And ew Scot. friend Andrew Scot, who was a great Practicioner at Paris for the time, & well exerciſed in the art of Chyrurgery, we did ordain remedies to let the increaſe of it, which receipt being ſent to the Apothecary, who before had ſeen the ſayd Captain, did think it no meet medicine for an Apoſtume (as he termed it:) ſo preſently he ſent for an ignorant Barber like unto himſelf, who did ſwear unto the Captain that they had ſawes and charmes for all ſores, ſo without further tryall did open it with a Launcet to avoyd the matter (as they thought) which being done, the ſpirit and blood came forth with ſuch violence, that the Captain dyed in few houres after. I doubt not but in theſe Countries divers ſuch errors are committed by ignorants. I doe uſe alwayes in ſuch, chiefly in the neck, under the armes, and in the papps, theſe remedies which I have preſcribed to the Spaniard, that is, firſt to draw blood in both the armes, then apply on the tumor *cerat Galen* or *debullo*, or this, *Rec. Pulveris ſubtiliſſimi boli armenici, ſanguis dragonis, myrtilorum, lapidis calaminaris in aceto extincti, abſinthii, an unc.* 1. *cum cerato refrigerantis Galeni quantum ſufficit, fiat unguentum.* For the ſame purpoſe I uſe a cake of Lead rubbed with quick-ſilver. Theſe things doe let the growing for a time, although it be nær the noble parts. If it happen in the extremities of the legs or armes, they may live a long time by the uſage of the foreſaid remedies. I knew a woman in Paris, who had a very great one in her thigh, and did live ten years. If it be little and ſuperficial, I finde nothing better than Cataplaſmes made of Claret wine, with cropps and leaves of Cyprus. When the artery had been opened in the place of the vain, as ſometime happeneth, I doe knit it after this form: firſt makes inciſion in the skin long-wayes, then diſcovers the artery, then palleth a Curbit needle with a double thread under the ſayd artery, two inches above the inciſion or ruption thereof, then knits it with a double knot, voyds away the blood contained, ſo cures the wound.

Error committed by ignorants.

Remedies for the *Aneuriſm.*

♄ eum ☿

Cataplaſmes for the ſuperficiall *Aneuriſm.* ℞

CHAP.

CHAPTER XLII.

¶ Of the Tumors or Apoſtumes in the Pappes.

THe Pappes which are glandulous parts, partly ordained for decoration, and partly to be anſwerable to the chambers of the matrix, and are ordained for the geneſtion of milk, they are ſubiect to divers diſeaſes, as other parts of like ſubſtance. Definition. *Gal lib. de uſu partium.*

The Cauſe, is ſuch as you have heard in other Apoſtumes, alſo retention of the monethly courſes, or abounda̅se of thick corrupt milk. The Signes, are ſuch as you heard in others ſuch like, as dolour, pricking, tention, redneſſe, feaver, and divers others. Cauſe. Signes.

The Cure conſiſteth in univerſall and particular remedies, as purgations and bleeding, cheifly in the ſavane vain, ventoſing and frictions on the thigh, with ſtrups and other convenient remedies, for the prouocation of the moneths, as you ſhall hear at larg in the Book of Diſeaſes of Women: uſe good dyet tending to humiditie. Cure.

The particular remedies differs not from other apoſtumes, ſaving that thou uſe familiar & weak repercuſſives, becauſe it is neer to the noble parts, in the beginning it ſhall be good to foment the pappe with hot water, Vinegar, and oyle of Roſes: or this, Take the flowers of Cammomill, Lyneſeed, and Fenegreeke, of each halfa pound, the iuice of Mallowes, Roſes, and Plantane, of each 3 ounces, Vinegar 2 ounces, wet a cloth therein and lay to the ſore: if it tend to maturation, take the crummes of white bread and bean meal, of each one half an ounce, flowers of Fenegreek as much, Mallowes, Althea and Lillis roots, of each a little; ſeeth them in milk, putting thereto the yolk of an egg, freſh butter, and a little Saffron, make a Cataplaſm and apply: when it cometh to ſuppuration, open *Paulus lib. 3. caſ. 35.*

it

Gal lib. de fasciis.
Vido vides in Interprete Florentino.

it with a Cauter or Launcet, evacuate the humor, and cure it as other Apostumes: use a Bandage of three sheaves, as is set down by Galen, to hold it up, for great hanging down maketh attraction of humors: Labour not with that arme of the sore side, for that maketh attraction of milke which letteth the healing of the sore: sometime womens papps doe grow very great not being sore, which is very unseemly, for remedy whereof, Fallopius biddeth take the hearb *Melissa*, bruise it and apply in form of a plaister, which leteth the growing.

Chapter XLIII.

¶ Of the tumor in the Thorax, called the *Plurisie*.

Definition.
Arnald lib 4. breviar. ca 5
Difference.
Paul 3 cap 32
Guido part. 4
Avicen 13. ca. de pluri.
Mesues de aegritud pector.

Plurisie is an inflammation and tumor, or a masse of blood, which turneth into a bilious matter, in divers parts, but chiefly of the membraines and muscles, which knit and cover the ribs, whereof there are two sorts, the false and true: the false is outward in the muscles of the short ribs; and the true, is that which happeneth in the membrains, which knitteth the ribs,

Cause.
Aetius serm 8 cap. 68
Avicen decima tertii cap. 15
Gal 4 locorum affect. cap 8

The Cause, is externe and interne: externe, is great heat or cold: the usage of strong wine or very cold water, violent exercise, and cold ayre after great heate: the internall cause, is great repletion of all the foure humors, but chiefly the blood and choller, which maketh the most subtill part of the blood ascend from cave vein unto the paine *Aygos*, thereafter in the vaines and membraines intercostalles.

Signes.
Gal. 5 locorum affect cap 3.
Hip. 6 prædict 2 text 10
Rasis lib 6 de mor par. ca 58.

The Signes are great dolour, from the shoulder unto the nethermost rib, punction in the side, continual fever, difficulty of respyring, coughing, hard pulse, great alteration, with want of appetite, evil favored breath, heavines, and ponderosity of the sides, great fever chiefly in the night, little

little ſleep, ſome ſweats which happen through the great pain.

The Judgements, theſe which cometh on the right ſide, are not ſo dangerous as on the left. If the ſpittle be black, livide, and viſcous, with continuall cough, vehement pain, long continuing, the urine be thick, blew, or black, it is deadly: if the cough be very drie and ceaſe not, it is an evill ſigne, but if the ſpittle be white, light and equall, with little cough, the patient ſleeping well, having good appetite, and urin red coloured, it is a good ſigne. Judgements. *Actius ſerm. 8. cap 65 & aph. 13. 22. 39. Avic. lib 4 Gal. li 5. meth. ca. 7. & 8.*

The Cure conſiſteth in univerſall and particular remedies: univerſalls, as glyſters, bleeding in both the armes, chiefly in the ſide oppoſite to the ſore, keeping good diet, abſtaining from ſtrong drink, Women, and perturbations of the mind. Cure. *Paul. li 3. ca 31.*

The particular remedies ſhall be cataplaſmes, linements made of flowers, with Cammomill, Melilot, Aniſeeds, Lynſeed, and Fenugrek, if the dolour be great and continus. *Fuchius* counſaileth frequent application of ventoſies, with ſcarrification of the part infected. If by any of theſe remedies the pain doth not ceaſe, neither you perceive any evacuation of the humor, by the mouth, urin, or fundament: It is to be ſuſpected that it turn into *Empyem* which is a collection of matter, betwirt the ribbs and the region of the lights or lungs, ſometime with corruption of the part, for the which we make inciſion, for fear the lungs be corrupt and become ulcered, then the inciſion ſhall either be made by Cauter or Launcet, but rather with the Cauter, for neither doth it cloſe ſo ſoon, nor is ſo dolorous: the opening ſhall be beſt betwirt the third and fourth of the true ribs beginning at the nethermoſt and count upwards, hold you ſix inches from the ridg of the back. In making of your overture, which ſhal be either with Cauter potentiall, or Curbit biſtory, till you come to the capacity within the ribs: make your overture at great length, beginning above, and guiding the biſtorie in by-wayes, from the third ribb to the fourth, *Gal. 5 meth. cap. 8.*

fourth, eſchewing the vaines, arteries, and nerves which are under the inferiour part of the ribbe: the overture being ſo duely made, evacuate the matter by degrees, and not all at one time, for feare you diſſipate too much the ſpirits: put a tent into it with an emplaiſter of *Diacalcithios*, or *Betonica*, mixed in Claret wine. Sometimes there is a certain congealed water, gathered under the Sternun or briſket bone. For the Cure whereof, *Columbus* counſaileth to trepan the Sternum; but I rather in that caſe approve the Cauter potentiall, as counſaileth *Arnalaus*: make a good eſcharre, hold it long open.

Columbus.

Arnaldus.

This Cure is rare and ſeldome practiſed, yet after this method I did cure one John Buchan Maſter of the Song Schoel in Glaſgowe, who was heavily grieved with a watry or congealed humor collected under the ſtern, of the which he was cured perfectly.

If you ſee tumor eminent in any place of the thorax, open it in the moſt convenient place. Hippocrates doth counſaile to diſcover the third ribb, and boze it with a Trepan perforative to let out the humor, then put a hollow tent either of Silver or Lead, and let not al the matter avoide at one time but by little and little, and cure it as other Apoſtumes.

Chapter XLIIII.

¶ Of the Tumor in the Navill, called in Greek *Axomphalon*, and in Latine *Eminentia Umbilici*, or *Hernia Umbilicalis*

The Navill is the middlemoſt part of the body, whereby the Childe is nourished in the Mothers womb: it is compoſed of ſinowes, vaines, and arteries, the which, when the Periton is dilated or rent, it doth ſwell and tumifie in ſuch ſort, that ſometime it doth rive.

Conſtantine.

Lonicerus explic. morb.

The

The Causes are divers, like as by the dilatation of Peritoon, whereby the intestine commeth forth, or by the bloud which may flow from the veins and arteries: also by wind or water in that part, and by knitting of the navill too short or too long after the birth: nere knitting, either slippeth, breaketh, or maketh convulsion, and other grievous diseases: by the too long knitting it giveth place to the intestine or *Omentum*, whereby some Bloud, Flesh, Water, Wind, or Vapours, doe occupie the eminent part. Cause. *Alb li 2 de cura eminentiæ numb cap 52. Gord part 8. cap 2.*

The Signes are knowne by diversitie of matter therein: as if the *Omentum*, the tumor is soft and the colour not different from the rest of the flesh: if the intestine, the tumor is soft, unequall, it returneth into the capacitie with a noyse or bruite: if humiditie or vapours, the signes are as you have heard in watrie or windie tumors: if through bloud, which hapneth by the ruption of som vayne or arterie, the signes like unto *Aneurisma*: if excrescence of flesh, the tumor is hard, and obeyeth not easily. *Fauentinus de med mor. cap. de amp. numb.* Signes. *Theoder. li. 5. Al li. 2 ca. 52.* *Anton. bene de abditis morb. causis.*

The Judgements are these, when the dilatation is great, it healeth not easily, and often riveth by som violence or great coughing. Judgements. *Paul li 6 ca. 51.*

The Cure is, first in good regiment, tending to sobrietie, abstaining from all flatuous meates, and all such as engender crudities, from moving, exercise, and such like. The particular remedies consists in emplaisters astringent, or this emplaister set downe by *Petrus Argilla*: also fomentations, astringents, and bandages, chiefly in the beginning: if that helpe not, reduce the pudding and quaffe, and cause the sicke to hold in his breath till you knit the production with a ligatour, then let it fall off it selfe, and produce the sicatrize. If it be rent by great violence or cough, and the intestine cometh forth, as happened to an honest Matron in Paris, whom I cured after this forme: First, I enlarged the dilatation with a Launcet curve, then reduced the intestine, and used the suture Pellitor, as is set downe in the general chap. of wounds, and cured it as other wounds. Cure. *Cels. 6 ca. 17. & li. 1. ca. 14.* *Petrus de argilla de emen. ubi. Chirurg. ca 48.* *Ra li 9. ca 71.*

If

If there be wind or water in the place, you ſhall cure it after ſuch forme, as you ſhall hear in the Chapter of woundy or watry herns or ruptures.

Chapter XLV.

¶ Of the tumor in the Bellie, called *Hydropſie.*

Definition.
Gal. li. 3 facul. natu. & cap 6. li. 6 5 de loc affi Avicen to 4. cap. 5. Arnald lib. 2. breviar ca. 40

Difference.
Trallian lib. 9 cap 123 Ga. com. 2. in aph & 4. de morb. acutu text 3, Celſ li 3 ca 21. Paul li 6. ca. 50. Roger. ca. 45.

Hydropſie, is a tumor againſt nature, ingendered of great quantitie of Water, Winde, or Flegm, which ſometimes is diſperſed through the whole body, and is called Univerſall, otherwhiles in ſome part therof, it is called particular. It is moſt commonly in the capacity of the Periton, of the which there are three ſorts, to wit, Aſcites, Timpenites, and Anaſarca. Aſcites, is a maladie that cauſeth the bellie and leggs to ſwell through a watry humor, the reſt of the bodie is ſmall and lean. Tympanites, is a maladie in the which is more flatuoſitie and leſſe humor, and in touching ſoundeth like a Drumm. Anaſarca, or *Lecophlegmatia,* is a diſeaſe wherewith the whole body, but cheifly the pitvie parts, are ſwollen with a pituitous humor, white and clear, accompanied with fever.

Cauſe.
Thiod. part. 6 Ætius ſerm. 10 cap. 20. Aſculeus ſa vonnola. Gal 5 loco affi. cap 7 Guido, part 6 cap. 5. Avicen tract. 4 cap. 4. Gal 5, loco affect ca ult. & lib 3 cap. 29.

The Cauſe, is either extern, or intern: extern, as ſtrokes, falls, heat, flux of blood, or great and long running of the Hemorrhoides or monethes: alſo through dyſentery and great uſage of humid meats, as ſounds, waterberries, evill water, and ſuch like, whereof we had good proof at the ſiege of Paris, alſo evill regiment. Plato ſayth, that in the time of Apollo and Eſculapius, neither Catarrhe, Hydropſie, nor many other diſeaſes which now raign, were known, the which we may greatly attribute to their great ſobrietie. The Cauſe intern, cometh chiefly by the vertue alteratrix and concoctrix of the liver, and by Apoſtumes of the liver, paſſions of the ſtomach, through the vice

vice of the vaines meseraicks, intestines, matrix, bladder, lights, milt, and kidneyes.

The Judgements, al Hydropsies after hot fevers, or happening in fevers are evill, and if through Apostume of the liver, it receiveth no curation: if by using remedies the sick groweth better, and within few dayes evil againe, he healed not: if the diseased become lazativ, and have no ease of his paine, or if the spittle, the breath, and excrements doth stink and slower evil, they be al signes of death: if slux of the belly with difficultie of respiring, he dieth within thre dayes: of all the three sorts ascits is the worst. Those that are young, robust, and the noble parts not viciated, especially the liver, and may use exercise, the humor not being putrified, may be cured. Judgements. *Tra. lib 4. Hip. prog. 2. text. 2. Gord. part 6. cap. 5. Alb li. 2. ca 54. Hippo in his Pr. sages. Hip aphs. 35. & 42. & aph. 5. & 7. Trallian. lib 9.*

Then for the Cure of such, there are three Intentions: The first, is in good diet tending to heate and dise, of good nourishment and light of digestion, little drink or none at all, if possible may be, and if the diseased may not pass without drink, he may drink a little clean old Wine. I knew a man that was cured by abstaining only from drynk halfe a year. Antonius Benevenus reporteth that he knew men cured by abstaining from drink one yeare, without using any other remedie. Let their bread be Barley, wherein shall be mingled the powder of Wormewood, Anyseeds, Betonie, Calamynth, *Calamus aromaticus*, Succorie, and Fennell, which things may also be put in their pottage, Asses or Goats milke were good to be used. The second intention is done with fomentations and unguents resolatives, as in Oedema you have heard. The third intention, is to corroborate the intemperie of the liver, as is amply set downe by Albucans. I did cure sundrie at the siege of Paris, by a remedie which I brought from a Turk, who was bond-slave to *Dondego de varro Viador*, Generall of the spanish regiment there, and is thus made, Take a handfull of Fennel roots, of *Appium Rusticum*, & *Eupatorium* as much, *Pseudo masculum* two handfuls *Petroselinum macedonicum* Cure. *Pau. lib 3. cap 2. & li. 2. cap. 48. De abditis morbor. causis. Tra. li 9 ca 2. Avic. 10. Aph. ca 3 tract 2. Gal. 14. meth. Gal 7 ap. Comment 57 & 3. de temp cap 8. Alb lib estat. Haly Abbat. Guido.*

one handfull; *Hepatica* or *herba Trinitatis* as much: of all thoſe, take the branches and not the roots, gathered dry in the Sonn, infuſe all in eight Engliſh pintes of white wine, and let it ſeeth till three pintes thereof be conſumed in an earthen pot cloſe covered, let not the aire paſſe out of it: it being throughly boyled, ſtrain it through a clean cloth and give to the ſick to drink allwayes, in ſo doing he will after three dayes take a flux of urine, which will continue fifteen or twenty dayes, in which time ſuch as I have handled were ordinarily whole. In all this time keep them very warm, uſe only roſted meat of good juice and light of digeſtion. Some in the ſaid diſeaſe doe counſell to make incision, the which I have often ſeen, but with evill ſucceſſe, and not to be uſed, as being rejected by Trallianus, Gordonius, and others. The manner of the incision is this: The ſick muſt be commodiouſly placed, then the oberture muſt be made either with Biſtorie, Launcet, or Cauter, three inches under the navill, towards the flank on either ſide, eſchewing the *Linea alba*, and extremities of the muſcles of the epigaſter, and the nerves and tendones of *Muſculi recti*, for in hurting of thoſe, grievous accidents may follow as fever, dolour, difficultie to conſolidate the wound, ſometimes death, as I have often remarked in the great Hoſpitall of Paris, and other parts: the incision muſt be very little, taking good heed you pick neither vain, artery, nor inteſtine, put a hollow tent in it, with a broad head made of ſilver or Gold.

Rabi 9 cap. 69. Alli 1. cap 32. Trallia. Gordo Celſ. li 7 ca. 18.

Brunus ca 8.

Arnald. ibid.

Inſtruments

Instruments to incise the Hydropick
With hollow tents of siluer or lead.



euacuate the humor by little and little, Cap the tent with a cloth or woollen spung after it be handled, and apply upon it a plaster of *Diacalcithios* mixed in wine. Paulus counsaileth, if the Hydropsie cometh from the intestines, to make the incision in the Nauill. Where are many other things which may be spoken of this matter, which I leaue

Paul. 3 cap. 48.

Celsus 3. ca. 22.

to the learned Physition, being more physicall than Chirurgicall: yet by reason that sometimes it falleth under the Chyrurgions hands, I thought good thus much to intreat of it.

Chapter XLVI.

¶ Of the Fistule in the Fundament. and the Cure thereof.

Gal. de usu partium.

The Fundament, which is called in Latine *Anus*, in Greek *Hydia*: it is that part whereby the excrements of the body are discharged, and is subject to indure thirteen grievous passions or diseases, to wit, Fistula, Thymus, Condyloma, Atrices, Clausio, Ragades, Hemorrhoides, Dritus, Paralysis, Ficus, Pruritus, Siccatrice, Apostumes, with divers others, whereof Vigo, Brunus, and Theodoricus, have spoken at length. Fistula, is a hard sinuositie, from the which doth proceed a humor or matter virulent. The Cause is wounds and ulcers, evill cures, Hemorroydes intern, or some Apostumes which have proceeded. The Signes are evident, it may be known by the sound, or seen by the *Speculum*, accompanied with dolour in those parts: flowing of a virulent humor, avoyding of Pus or matter purulent, with the excrements: Of those there are two kinds, the one is obscure, hidd within, without any appearance of orifice externally, but only within the intestine called *Intestinum rectum* or in the muscle *Sphincter*: the other kind which is manifest, is known to the sight being extern. In the cure, there is diversitie of opinions amongst the old writers: Avicen, Gordon, and some others, counsell unto applicatiments, and other medicaments, with tents of Candle, and cleane cloths to hold it cleane; others are of opinion to use manuall operation, which is done three wayes, to wit, by Cauter actuall incision, and ligature.

Definition.

Cause.

Signes.

Celsi li. 5 ca 28 lib 7 cap. 4 & 30.

Theod. lib 3. cap 43.

Cure.

Gord part. 1. cap 7.

Brull 2. ca. 6 Alb li. 2 ca 80. Guido tract 4 de ulc. 6.

Albucasis, Brunus, Theodoricus, and Gordon, doe counsell to cut away, consume the Fistule and callositie, with actuall

or

Cauters,

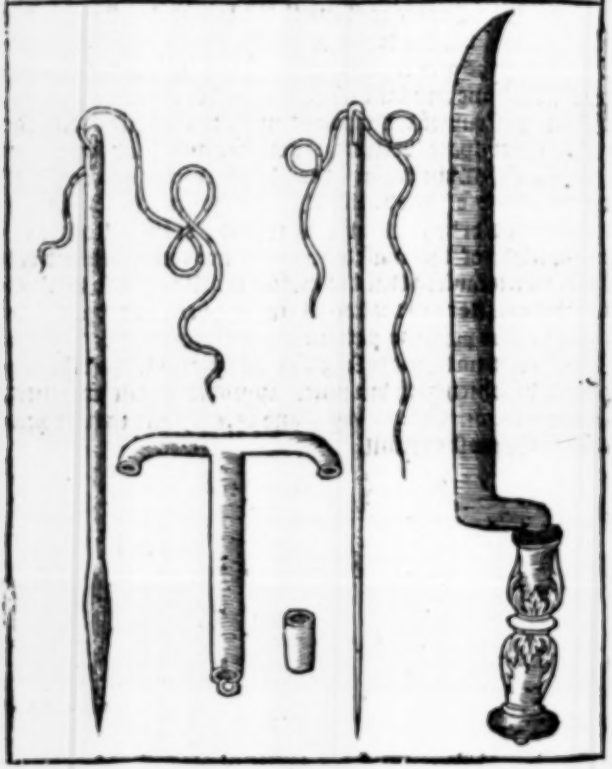
Cauters made and accommodated to the greatneſſe of the Fiſtule. The Cauter conſumeth the humidite, ſtayeth the flure of blood, but the forme is cruell, paineſull, and uncertaine: there be others, who are of opinion to cut, make inciſion, conſume and take away the Fiſtula with a Biſtory, or other Inſtrument purpoſely made to that effect, and cut all the inner-ſpace betwixt the oriface and fundament, as Paulus ſaith. This forme doe I not approve by reaſon of the great flux of blood, which often happeneth, as I have ſometime obſerved: as alſo by cutting of the calloſitie often the fibres of the muſcle Sphinctir are conſumed and cut away, which cauſeth that the matter fecall is not ſo well retained thereafter: ſo that at all times when the excrements approched the port, the patient is ever forced to goe to ſtool. I have found no forme ſo ſure nor leſſe painſull than the Ligatour, the which hath bin much approved by our ancients, as Hippocrates, Celſus, Vigo, and others, and is now practiſed by the moſt skilfull.

Alb. li. 2. ca. 36.

Paul. li. 6. ca. 78.

Hip. li. de fiſtu. Vigo lib. 4. de ulcerib.

Instruments to cut and Knitt the fistula in the fundament.



the forme whereof is this. The sick must first be purged, and use a good diet for a certaine space, especialy in the night before the operation, which shall be about 8. or 9. of the clock in the morning, then the patient shall stand upon his feete, bowing himselfe forward over, either upon a bed or chaire, holding his legs and knees asunder, and so continue till the

operation

operation be done, then the Chyrurgion shall put his middle finger in the fundament of the patient, til he come to the upper part of the Fistula, the finger being first annointed with oil or butter, then with his other hand he shall passe a sound made in form of a Nædle Allstone, which must be made of Gold, Silver, or Lead: the Gold and Silver must be so tempered that it ply like Lead, yet hard and sharp at the point, thread it with a thread of four ply that is well rubbed with wax: some doe annoynt it gently with caustick oyl to make it cut the sooner: then passe the sayd Nædle or sound in the orifice of Fistula, thrusting it forward until the time you find it on the point of your middle finger, which is within the fundament. If there be any little membrain betwixt as often happeneth, thrust the Nædle through the same, which being done, you must ply it with the point of the sayd finger: in thrusting it the one way, and conveying it out by the fundament, then knit the thread with a running knot somewhat slack, then tye it every day faster and faster till the inter-space be consumed. For this purpose doe I use a little Instrument of silver, that is bolle or hollow within of two inches broad, or thereabouts, with a little round ring on the end thereof, and the Ring must have a reft that it goe not about, the thread must be tyed to the Ring and wound about every day after it be past through the Instrument: by this means you shall doe the operation more cleanly and easier, than by only tying of it: if the inter-space which you must cut be great and long, in such sort that sometimes the thread doth rott therefore you must tye a new thread to one of the ends of the former, and draw it through, and passe it through the Instrument, and tye it to the Ring as before. If the Fistula be obscure and have the orifice intern within the fundament which is more difficile than the former, you must with a *Speculum ani* gently dilate the fundament, till you perceive the orifice, then passe your Nædle or sound in the orifice as of before, thrusting it in the orifice almost through to the further side, so conveying it downwards

Parr. lib. 12. cap. 23.

A needle of Gold or Silver for the Fistula.

till it come to the ground or bottome of the Fistula. This Sound which we use commonly in this kind of Fistula, is of Lead, so is not of force to peirce through the whole byte, for the which we are constrained to make incision in the utter side against the point of it, so passeth it through with the thread, and layes it to the ring through the Instrument as before. This Cure I did use at Paris to a Scottish gentleman called Colonell David Boyd, who had the orifice of the Fistule intern so high up, and the interspace was so great, that I was the space of eight weeks in consuming of it, and the Gentleman was made perfectly whole. Here you must mark, that Fistules which are very high, are neither to be cut nor knit, because the sick shall ever be constrained to void his excrements so soon as they approach to the port, for the which it were better to use remedies palliatives, then hazard any other cure.

Chapter XLVII.

¶ Of *Thymus* in the Fundament.

Definition. *Thymus* is the worst kind of those five sorts of waters or little tubercles which happeneth in the fundament, it is called *Thymus*, because it is *Tuberculus*, and groweth like the flower of time.

Cause. The Cause is evill humors, which doe come from the *Celsus 5 ca. 28* whole body, but chiefly *a ramo spleneo*, with the humor oftentimes there is a malignity.

Signes. The Signes, Are Ulcers, Tubercles, Fetide, avoyding a matter virulent, and are for the most part small at the root.

Judgement. The Judgements, In old people soon coming, we doe attempt no cure but only palliatives, for oftentimes being not cunningly handled, or in people of evill temperature it becometh carsinomateus, so the sick dyeth miserably.

Cure. The Cure, Is to purg the body of the vitious sharp humors

mors every week or fortnight once, draw blood, kep good diet and rest, it were good to used decoction of *China* and *Sarsaparilla* in the morning to provoke sweat, as also at meals. If that humor be retained and not purged away, it may ascend to the noble parts and suffocate the sick; for the help whereof Hippocrates counselleth the cauter actuall to be used and alledged to have often proved the same with good successe. I have oftentimes seen the cauter actuall used in the great Hospitall of Paris, but with small successe. When these excrescences or warts be but little & few in number. I have sometimes consumed them with powders, but such as are great and many in number, are to be knit with ligatours, as you have heard in the Chapter of *Paraulis*: if any thing rest after the ligatour, you shall consume it with caustick powders, waters, and other medicaments. After which method I did cure a singing Boy in Our Ladies Church at Paris, who was grievously handled with a Thyme about the whole fundament the space of three yeers, of the which I did heal him perfectly beyond the expectation of many.

CHAPTER XLVIII.

¶ Of the tumors in the Fundament called *Condiloma*, *Asrices*, and *Clausio*.

Definition. *Celsus li 6 ca 18 Aetius cap 8. lib 6. Fernelii 7 de simpt cap 11. Gordo. part 5. vulg.*

Condiloma is a certain excrescence of flesh, hard, tuberculous and membranous in the brims or borders of the fundament, sometimes accompanied with great humor, tumor, and swelling, sometime not swelled, and are called *Asrices*. The Cause is the weakness, softness, and low situation of the part, also defluxion of humors which become rotten, for the which it is hard of curation. The Signes are manifest to the sight, accompanyed with great tumor and dolour. The Cure consisteth in good regiment of life, and rest, purging of the body chiefly with Glisters, bleeding

Cause. *Celsus loco citat.*

Signes.

Cure. *Paul. li. 3. ca. 89*

bleeding in the arme to divert the humor and stop inflamation, use vomitories and things to provoke urine. The topicall remedies are to use liniments refrigeratives in the beginning of oyl of Roses, *Cydoniorum*, whites of eggs, thereafter use remolliants & discutients: if it tend to suppuration, use such remedies as you have heard in others, putting thereto a little *Tapsia Barbara*. It must be opened in form circular, to the end the matter be not long retained, which easily causeth Fistula. If the excrescences be great and hard, it must be consumed with caustick instruments, as counselleth *Celsus*. Sometime the fundament is closed, as once I saw in the Country of *Picardy* of *France*, in the town of S. *Quintin*, where I did bring a woman to bed with two children, the one had an excrescence of flesh from the fundament, and did dye soon after it was born, the other had a membraine which did close the passage of the excrements, which I cut with a bistory and it healed very easily. This happeneth often to mayds in their naturall conduits, for the which doe the like, otherwise have your recourse to *Celsus*, or to my Book of the Infantment, where I have amply entreated of that matter.

Lib 6. cap. 18.
Paul. li 6 ca. 81
Alb li. 2. ca 70.
Lib 7 cap. 18

Chapter XLIX.

¶ Of the tumors in the Fundament, called *Hemorrhois*, and *Ragades*.

Definition.
Bru. li. 7. ca. 15.
Ral li 9 ca 80.
Al li 2. ca 81.
Ra li 3 ca. 45

The Hemorrhoides are an inflammation of some one of more of the four vaines which goe about the fundament, of which there are divers kinds, as sayth *Fernelius*: some are interne, which are not to be seen, others extern, some are swelled and doth always no humor, but in end of time return inwardly, sometime open and doe always a abundance of melancholique blood which maketh great pain.

Cause.

The Cause is great abondances of melancholique, pestilentious,

tous, or bilious blood, great usage of medicant medicines.

The Signes; If the humor be cold, the sick feeleth great heavinesse, dolour, and trembling of the belly: if the humor be hot, there is great pulsation, evill colour of the face, and heavinesse of the eyes. *Gord part. 5. cap. 2.* Signes.

The Judgements, The disease is dangerous and difficile, in respect of the great evacuation which oftentimes ensueth and causeth Hydropsie, evill colour, and weakenesse of the body, which doe often end in *Fistula*: If they be suddenly stayed, they often doe ingender dangerous maladies, and sometimes death, by reason of the humor which taketh the course as to the liver, or lights, as saith Barta Pollio. If they avoyde moderately it is good, and doth preserve the sick from Melancholique, Leprosie, Stranguric, paine in the sides, and inflamation of the Lunge, The naturall course of them is, to avoyde every moneth once, or at least foure or five times a yeare. Judgements. *Hipp. lib. de Humor.* *Rasi 9 ca 80.* *Barta Pollia.* *Hippo 6 epid.*

The Cure is somewhat difficile, the part being sensible and cold, having no force of it selfe, as also being in the part easie to receive fluxion of humors, and not easie to become untost all times: yet the cure (in so much as may be) consisteth in good diet, abstaining from all things of evill digestion, and which breed melancholie, next purge gently the body, bleed in the arme, if either they flow over-moderately, or be painefull, also bleed the vaine Saphen: if they be tumified, apply an horse-leech called by the Latines *Sanguisuga*, and that of such qualitie, as you may perceive in the eight Treatise of this Worke, and use some medicaments to make them fall away, and to ease the paine, as cataplasmes, fomentations, halfe baths, or fassettes of Henbane, *Tapsus Barbatus*, Camomill, Violets, red Roses, Mallowes, Linseed, all sodden in milke and applyed on the part: also you may apply the yolke of an egge, Oyle of Roses, Rose-water, and creame, after the foresaid manner. Sometime I have used with good successe Barly flower mixed with Women or Goates milke, adding thereto a yolke of an egge, and a little Cure. *Cels. li 6 ca. 18* *Fuch lib 3 de vitiat. morb* *Baptista Mantuan.* *Roger. tract. prim. ca 91.* *Rasi 3 ca. 46.*

a little Saffron, & apply it warme in forme of a cataplasme, with a band of three skeins. Some for this purpose use hogges dung hot on the part for the appeasing of the paine: or this, Take Sorrell, Violets, Henbane, of every one a little, well rosted under the ashes, thereafter beaten with a little hoggs grease and lay on the sore. If they avoyd immoderately, apply ventosies on the shoulders, with astringent and corroborative plaisters, on the *Os sacrum* and fundament made of Sanguis draconis, Mastick, Mallowes, with the haires of an Hare cut very small, with a little powder of Roses, mixe all together with the white of an egge, and apply to the sore.

Montanus.

Paul. 6. ca. 79. If the paine be vehement and interne, take a tent wet in the aforesaid remedies and put into it, or this Unguent composed of *Rosat Mesues, Cerat. galen,* and unguent *Commessa*, mixed together in a morter of Lead. Plinius doth counsell, when there are divers of those vaines, to leave one open for a space, in case the humor take the course to some noble part. *Hippocrates* saith, in old Hemorrhoides which have long run, if one be not left open, there will be danger of hydropsie and ptisick. There are divers other familiar remedies for this purpose, set down by divers old Writers, *Ragadiæ* doth differ from *Hemorrhois*, in so farre as they are certaine excoriations, ulcers, or fissures, in the vaines or fundament, and are dolorous without tumor. The Cause are strokes, falls, or some sharp humor which corrodeth these parts: for the cure whereof foment the part with warme Wine which doth comfort, next apply drying salves and unguents made thus, *Rec. Lithargyri auri & argenti, cerussæ lotæ, aloes lotæ, myrrhus, mastichis, sarcocollæ, ballaustii, & boli armeni ana. unc. sem. pulverisentur & agitentur cum unguenta cemitissæ vel oleo rosæ:* make an unguent and anoynt the part therewith.

Lib de Hemor.

Ragadiæ.

Paul 3 cap. 59.

Roland. lib. 3.

CHAP.

Chapter L.

¶ Of the tumor in the Inteſtine when it falleth out, called by the Latines *Exitus Longanonis*, or *Ani Procedentis*

Exitus Longanonis, is the out-comming or turning o'ver of the great inteſtine, which happeneth through the laxation of the muſcle Sphincter, which maketh it fall out and tumble; it is common to young children. The Cauſe is externall, and internall: externall, are falls and ſtrokes, chiefly on the *Os ſacrum* ſitting on cold ſtones, great preſſing of the fundament, and Apoſtumes which happen in thoſe parts. The internall Cauſe, Is great humidity which relaxeth the muſcle, ſlure of the belly, and often preſſing to goe to ſtool, chiefly in thoſe who have the Dyſenteryy. The ſignes are apparant to the ſight. The Cure ſhall be in generall and particular remedies. The generall is good regiment of life, abſtaining from much drink, pottages, hearbs, fruits, and all meats, that engender great humidities and rawneſſe, uſe gentle purgations that have the vertue to purge the weak raw humor. Sometimes it is long out, expoſed to the aire and tumified, ſo loath to be reduced: for the which you muſt foment it a little ſpace with warm milk. The particular remedies are to foment the part with ſmith-water, and red wine, wherein ſhall be ſodden red Roſes, Myrtills, Centory, and Sheepheards purſe, *Beaſt, nux Cupreſſi*, Horſ-Allom, ſeth all together and foment the place: then annoynt it with oyl of Bayes, and Myrtils, and apply on it the powder of Maſtick, Myrrhe, and Nuts of Cypreſſe, thereafter cauſe the ſick to draw in his breath, ſo it ſhall be eaſily reduced; being put in, wet a cloth in the former fomentation and lay on it, then binde it for a certain ſpace. In going to ſtool beware in preſſing to ſore, neither goe to any vile privy, or any other part to expoſe you to

Definition. *Rol. li 9 ca 21.*

Cauſe. *Guid. part. 5.*

Signes.

Cure. *Celſ. li 7 ca 22.*

Faventinus de partur. morb.

Arnald lib. 2. breu. cap. 24.

to the cold, but keepe you alwaies warme: if for all this it heale not, have your recourſe to my booke of Infantment in the Chapter of the diſeaſes of young Children. As for Paralyſme in the fundament, it hath the like cauſe and cure as the former.

Chapter LI.

¶ Of the Periton, Epiplon, and Inteſtines.

FOraſmuch as in the Chapters next following I mind to entreat of ſuch diſeaſes as moſt commonly fall in the Cods, for the which it ſhal be requiſite to ſhew ſomewhat briefly of the compoſition, ſcituation, and office of ſuch parts as moſt commonly doe cauſe certaine of theſe diſeaſes, as alſo that the young Chyrurgion may be the better inſtructed. For as ſayth Galen, hard it is to cure any diſeaſe except firſt wee know the nature and ſcituation of that part whereupon wee worke, as alſo the cauſe of the diſeaſe; otherwiſe neither ſaid is able to prognoſticate of the event, nor give the ſame. Therefore I intend to begin at that tunick or membrain, which is the chief part whereof the true proper ruptures doe proceed, and is called *Peritonæum* in Greeke, and *Siphac* by the Arabians. It is ſubtil and ſtrong and furniſheth a membrain to all the parts contained in the inferiour womb, for the which it is called *Peritonæus tunica ſeu membrana*, it is compoſed of two tunickes or membraines, and ſerveth for ſundry uſes. Firſt, it ſerveth to cover al the parts of the inferiour belly, to wit, under *Diaphragma* or *ſeptum tranſverſum*: it doth ſeparate all thoſe parts from the muſcles of the Epigaſter, it doth tye thoſe parts together, and giveth a tunick or ſkinn to each one, it helpeth the deſcending of the excrements: ſome Anatomiſts be of opinion, that it is peirced through in that part which is neare the Jugulum, by the which paſſage the ſpermatick veſſels do deſcend to the teſticles, alſo the inteſtines

Gal li 5 an. & 5. de uſu part

Gal li 4. de uſu partium. Diaphragma.

Gal li 1. de ſemine & 6. de adm. anato.

or *Omentum* to the cods. Next followeth that part which is called *Omentum* by the Latines, & *Epiploon* by the Græks, in Arabick *Zirbus*. It is compoſed of two tunicks, which proceed from the *Peritonæum* of divers veins, arteries & greace, it is extended upon all the inteſtines, & helpeth their concoction being weak and debill, it preſerveth the naturall heat in time of famine and hunger: it is tyed to the bottome of the ſtomack, and endeth at the *Oſſubis*, ſometimes it falleth in the *ſcrotum* as you ſhall hear in the proper Chapter. The Inteſtines or gouts, are called in Latine *Inteſtina*, and in Græk *Entera*: they are compoſed of two proper tunicks, beſides that which they take of the *Peritonæum*. The proper tunick maketh the faculty expultrix more ſtrong, as alſo preſerveth the inteſtines from outward injury; the tunick exterior is membrainous, and the interior more fleſh. The Inteſtines are ſix in number, to wit, three ſmall to diſtribute the chile by the vains Meſeraicks to the vain port and liver, they have ſome vertue concoctrix, as alſo expultrix to expell the excrements: the three groſſe inteſtines are ſubject to receive the excrements, like as the bladder receiveth the urine. The firſt of the three ſmall inteſtines, is covered to the ventrick by the *Pylorus*, it is called *Ecphyſis* which is, as if you would ſay, beginner of the inteſtines; it is called *Duodenum* becauſe it is 12 fingers in length, it goeth along the rigg back, and giveth place to the vain port, arteries, and nerves, and pores which containeth the choller. The ſecond Inteſtine, is called in Græk *Maſtu*, and in Latine *Jejunum*, becauſe it is ever empty, it receiveth the chile from the ſtomack next *Ecphyſis*, and diſtributeth it lovainly to the liver, becauſe of the multitude of the meſeraick vains. The third ſmall Inteſtine is called *Ilion*, becauſe it is ſituated next theſe parts called *Ilia*, as alſo by reaſon of the Iliack paſſion, which happeneth in it: ſome doe call it *Miſerere mei*, or *volvulus*, when the ſick aboydeth the excrements at the mouth. It is reported by *Lonicerius*, that *Hippocrates* did dye of this diſeaſe. It maketh many circum-

Gal. 4. de uſu part. & 6. de anato.

Gal. 4. & 5 de uſu part. & 6. de ana admin.

Gal. li 6. locor. affect.

Miſerere mei. Hippocrates. dyed of Miſerere mei. Lon. expl. mir.

circumvolutions, to the end it may retain the chile the longer, and maketh the better attraction of it to the meſeraike vains. The fourth and firſt of the great Inteſtines, is called *Coecum*, becauſe it hath entry and no iſſue that can be perceived: it is apt to receive the excrements, and alſo the fecall matter in it is firſt formed: it is ſcituate on the right ſlancke called *Ilia* under it is the right neere it doth fall oftentimes in the *Scrotum*, and is called by the vulgar Chyrurgions *Sacculus* or *Monoculus*. The firſt and ſecond of the great inteſtines is called *Colon*, becauſe it is greater and fleſhier than any of the reſt within, it is full of greaſe, it paſſeth from the right *Ilion*, to the left and bottome of the ſtomack, that oftentimes it touched the liver, and milt. Thoſe who are vexed with the winde Cholique do often vomit, becauſe it being tumified or ſwelled, doth preſſ or compreſſe the bottome of the ventrick. The firſt and laſt of the great Inteſtines, is called *Rectum*, it lyeth right above the *Oſſa-crum*, and is an ample receptacle of the excrements, it doth extend to the fundament or *Anus*, & is called by the barbors *Longanum*, it hath certaine volutions: In this Inteſtine is diſpierſed a vaine, arterie, and nerve of the firſt conjugation of the braines to give feeling: in the end of this gut there is a muſcle called *Sphincter* or *Cloſer* to cloſe and hold the excrements, till nature be willing to diſcharge them: if it be either debilitate or hurt, man is ever compelled to goe to ſtoole as you have heard in *Fiſtula ani*.

Vaſeus lib de anatom.

Gal. 3 9 26. de uſu partium

Chapter LII.

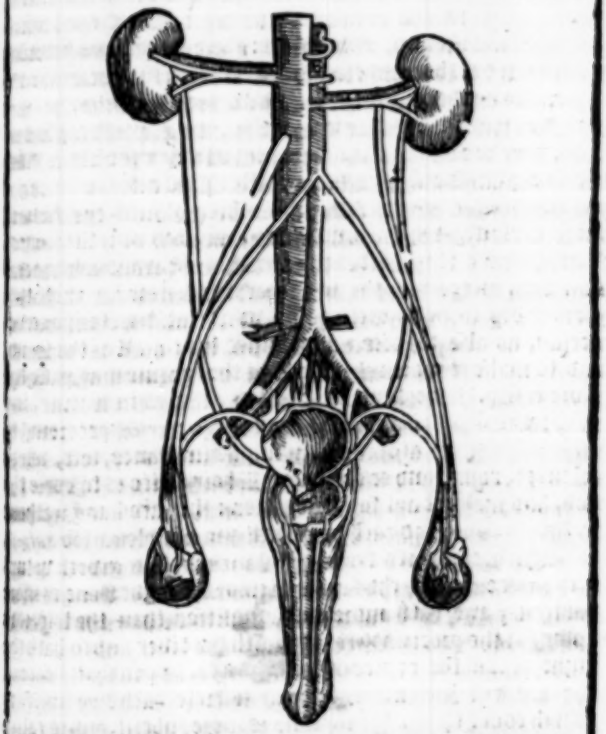
¶ Of the Spermatick Veſſells and Stones.

The Veſſels ſpermaticks are called in Latine *Vaſa Seminaria* or *Seminalia*, they are long, large, and varitious, and are in number foure, to wit, two vaines, and two arteries: the right vaine commeth from the vaine cave, the left oftenest from the vaine emulgent: the arteries procead from the great arterie called *Arteria aorta*.

Gal 4 de uſu partium.

Their

Portraiture of the Sparmatiques Veſsels and ſtones.



their office is to carry the blood and ſpirits to the teſticles where they end, ſome call them *vaſa preparantia*. The vain goeth above the artery, but not right line as other parts doe, but in anfractuoſities, like unto a Woodbine or Vine-branch: in which anfractuoſities or revolutions, the blood and ſpirit is carried to the ſtones, and is ſomewhat prepared, *Gal. li. de ſem. & 14. uſu par.*

prepared, before it enter in the said stones, where it taketh a more perfect concoction and becommeth white, thereafter it doth enter in the vessels ejaculatories which are named spermatick vessels or expellents: these doe take their beginning from the middest of the testicles, they rest and are holden up by the gland *Epididimis* to goe above the *Os pubis*, they doe passe up the same way the vessels preparants descend, they doe end in the beginning of the necke of the bladder in 2 glands one in each side called prostrates, q by *Herophilus*, *adenoides prostrata* in the which glands the sæde is more perfectly whitned and fined than it was in the stones, from whence it is sent to the canell of the wand when occasion doth offer (but the seldomer the better:) these two glands doe serve to excitate & give a dilatation to the act venerian, as also to soften and bunect the canall of the wand, and to make it more lubricke that the sperme may passe the more easily. The stones are called *Testiculi* in Latine, and in Greeke *Orchies* and *Didymi, id est, Gemelli*, according to *Herophilus*, they are of a glandulous substance, soft, white coloured, round and cavernous. Their office is to boyle the sæd, and make it apt for generation: they are hung without in the *Scrotum*, and each one, hath one muscle called *Suspensor*, which commeth from the flanckes, and giveth voluntary movement to the said testicles: the right stone is more pariconus, and hath more infractuosities than the left, it is hoter for the proximity it hath with the liver and so hath the right part of the corner of the matrice, as you shall heare in the Book of Infantment: each testicle hath two tunickes which cover them, the interne is more subtill, and is called by the Greekes *Erythroides*: the externe is stronger and doth adhere to the interior which is called *Dartos*.

Cels. li 7. ca 18

Herophilus Gal lib. 2 de sem.

Cels. li 6 ca. 18

Herophilus. Gal li 14 de usu pa. & aph. 48. lib 5.

Constantine. Isadorus.

Gal. li. de dessectu vulvæ.

Chapter LIII.

¶ Of the tumor in the Cods.

If the Cods are scituate the stones, which are ordained by nature for the generation of man, and are subject to divers

divers sorts of tumors and inflamations. Sometime the stones doe swell and tumifie to the bignesse of a Geese egg, accompanied with great dolour, heat, and hardnesse. The Causes are, Either Internall, or Externall: the externall, are stroaks, falls, and application of such remedies which doe offend theis parts: the internall cause, is defluxion of humors, which happeneth in the lower parts of our body, retention of a *Gonorhea* which is malignant: also when the seed is any wates out of the own domicile, and yet retained in the capacity, as happeneth sometime to young men in the night, so waking at the discharge of that humor doth retain it by force, which afterward doth rot and make defluxion on the stones as I have often seen. The Signes are inflamation, dolour, hardnesse, heavinesse, which may easily be perceived, great dolour of the muscle Suspensor, which giveth voluntary removement to the stones. The Judgements, If such tumors be not swiftly cured, the tumor doth sometime become hard and skirrous, which cannot be cured but by amputation, the which I have remarked within theis thirty years. The Cure is generall and speciall: the generall, in good regiment of life, abstaining from strong drink, eating little and of good digestion, with moderate exercise, and bleeding the vain saphine, using of Glisters, and provoke urine. The topicall remedies differ not from other tumors: saving that we neither apply resolutants nor suppuratives without great consideration, but repercussives in the beginning, like as oyl of Roses, Vinegar, whites of Egges, and such like: or this, Take white bread, milk, whites of eggs, oyl of Rose, a little *Opium* and Saffron, of this make a catapiasm or plaister, and apply it to the sore: if it serve not, use this remedie that hath the vertue to repell and discusse the humor. *Rec. Radicum althea, & lilian. unc.* 2 *foliorum violarum, malvæ, parietariæ, plantaginis, hyosciami, an. man.* 1 *Camomellæ, Mileloti Rosarum siccarum an P.* 1 *coquantur in eximellite cum farina faborum & hordei an. unc. sem.* If it turn to suppuration,

Gal. lib. de u'u part. & actis med. cap 9.

Cause.

Largi tract. 3.

Signes.

Judgements.

Cure.

Barta Paliu. Gordo. part. 5. cap. 6.

do as you have heard in other Apostumes, if by long delay the stone become altered, the best remedie is amputation: if vehement dolour, as often happeneth, apply on the sore *Cassia fistula*, or new cheese with a little Vinegar, which are things most anodine in such griefe: or this, Take *Ceratum refrigerans galeni unc.* 1. *Popullion* 2 *unc. nutriti unc. dimid.* mire altogether and apply on the sore.

Chapter LIIII.

¶ Of *Hernies* in generall, which happen in the Inguina or Codds.

Gal. tom. 1. cō tra cap. 18. *Ætius serm.* 14 *cap.* 12, 13, 14.

Like as in divers part of the body happeneth divers diseases, so in those parts there happeneth eight sorts of maladies commonly called Ruptures or Hernies, and are devided in propers and commons: the first of the propers is called *Bubonocele* or *Hernia incompleta*, that is, when the intestine or *Omentum* remaineth in the Inguina. The second kinde is called *Hernia* or *Ramex intestinalis*, which is, when the intestine falleth in the Cods. The third is called *Epiplocele* or *Hernia Zirbalis*, which is, when the call or *Omentum* falleth in the Cods. The first of the commons is called *Hydrocele* or *Hernia aquosa*, which is a watry humor in the Cods. The second is called *Physocele* or *Hernia ventosa*, which is a vapour or winde in the Cods. The third is called *Sarcocele* or *Hernia carnosa*, which is a schirrous or fleshy substance in the Cods. The fourth is called *Cirsocele* or *Hernia varicosa*, which is when the vains that nourish the Stone, are dilated and full of melancholique blood. The fist is called *Hernia humeralis*, which is when any defluxion of humors falleth on the Cods. Of all those sorts of Hernies you shall hear in the severall Chapters ensuing.

CHAP.

Chapter LV.

¶ Of the tumor Inguinall, called *Bubonocele*.

Bubonocele is a tumor in the flanck, either of the call or intestine, which happeneth through dilatation or ruption of the Periton, and is called by the Latines *Hernia Inguinalis*, or *Incompleta*. The Causes are externall or internall: the externall, are strokes, leaping, wrastling, crying vomiting, coughing, ryding on hard trotting horses bearing of great burdens, violent using of women, or violent exercise, dilatation of the membraine in women through great travel in childe birth. The internall cause is usage of viscous and flatuous, great repletion of the belly, with abounpance of superfluous humors. The signes, if it come through relaxion, the *Omentum* reduceth easily, if the intestine be fallen, you shall heare a noyse or bruit in the reduction, and it is dolorous. The Judgements, many doe die of this disease, the gut being forth of the production, and fileth full either of winde, or excrements, or both, which is so difficile and painfull to be reduced, that the sick dieth. The Cure, you must use first fomentations, remollients, and discutients, made thus: *Rec. Radicum althea, bryonia, encumeris agrestis an. M. 1. florum, & foliorum cammomilli, meliloti, & rosarum an. P. 1. seminis althea, & fenugreci an. unc. sem. coquantur omnia in aqua aut lacte.* and foment the part with spunges. If by these remedies it reduce not, by reason of the abundance of wind, you shal use 5 or 6 punctions in ꝑ part with a nedle, as I have often proved: it dispatcheth the wind, so the intestine doth the more easily reduce: if the excrements impasse the reduction being hard, you must incise the Periton, as is set down by *Rasis*: Thereafter use an emplaster astringent with a bandage for a certaine space, in so doing such as come by relaration, doe sometime heale. Others which come by ruption, hardly doe heale: so the best remedy is to have a Trusse purposely made of cloth or yron.

Definition. *Celsi li 7. ca. 24*

Cause. *Avi. 22 ca. 3. Aëtius serm 4. cap. 22. 23. & 24. Gordo. part. 7. cap 7.*

Signes. *Avi. 22. ca. 3.*

Judgements. *Pa. li 6 ca. 66.*

Cure. *Arcu 9 almans*

Ra. lib 9 ca. 29.

Portraiture of a man Rim-burst.



Celſ lib 7 cap. 20 & 24 Ro.li.3.cap.35

with an emplaſter aſtringent, and no other cure to be tempted. There are ſome ignorant covetous people, who take upon them to heale thus with two complytes by drinks, charmes, praying to Saints, going on pilgramage, which are all falacious and founded upon no reaſon. Others doe

Theodoricus.

counſaile to cure thoſe Hernies by actuall cauters, as *Theodoricus:*

doricus : *Langfrancus* by potential cauter, *Bernardus* and *Rogerius* by wearing of the golden thread called *Punctus aureus*, which are all dangerous and uncertain wayes.

Langfrancus. *Bernardus.* *Rodgerius.*

CHAPTER LVI.

¶ Of the Herne inteſtinall, called by the Greekes *Interocele.*

THis kinde of rupture is when the guts fall down in the cods, either through ruption or enlarging of the Peritõ where the ſpermaticke veſſels doe paſſe, and where the muſcles *Cremaſteres* do end, and the membraines *Dartos* and *Erithroides* begin, wherein the gut, call, or both doth fall. The cauſes are like unto *Bubonocele*. The Signes is greatneſſe, tumor inequall, ſometime hard by reaſon of the fecall matter contained therein. The judgements are theſe, there is great inflammation, and the more you preſſe to reduction, the inflammation often is the greater : ſo that ſometimes it changeth the colour red or blew, which are evill and deadly ſignes, ſounding and avoyding the matter, are evil ſignes: and if the inteſtine be not reduced, the patient dyeth, which happeneth through the narrowneſſe of the dilation. As for the Cure, firſt purge the body with purgations, juleps, pils gliſters, and ſuch like, as ſhall be thought expedient by the skilfull Phyſition ; which being done, you ſhall come to the uſage of topicall remedies, as firſt you ſhall rub the cods and parts adjacent with oile of Cammomile and Lylies, alſo fomentations and cataplaſmes, remollients, which ſhall be uſed for a ſpace : thereafter lay the ſick on his backe in ſuch ſort, that his arſe be higher than his head, reducing the inteſtine by little & little with your hand, preſſing moſt on the part where it deſcendeth : If the fecall matter let the reduction of it, you muſt uſe ſuch remedy as is ſet down in the laſt Chapter, with Gliſters to diſcharge the inteſtine, if by thoſe remedies the inteſtine do not reduce, but the matter

Definition. *Baccha. lib. 3. de curan. morb. Pa. ca. de rami. Faventin. de med. morb Paveus lib. 7.*

Cauſe. *Arcu. Almanſ. Actius ſerm. 14 cap 22.*

Sign s. Judgement. *Arcu. 22 ca 2. Actius ſerm. 14 cap. 4. Rol li. 3. ca. 39.*

Cure. *Theodo. lib. 3. cap. 35.*

fecall doe war hard with great dolour, you ſhall make inciſion in the upper ſide of the codd, eſchewing the Inteſtine. Therafter put a little piece of wood up by the production of the Periton, neer unto the hole of diſſent. The piece of wood muſt be round on the one ſide and flat on the other, whereon you ſhall make the reſt of your inciſion, then rubb the inticed part & hole of diſſent with a little oyl of Cammomill, or Lillies, which will make it lubrick, and cauſe it to reduce more eaſily. If then it reduce not, the Periton muſt be inciſed, and uſe the cauter Caſtrozaphick, and handle it as other wounds: this operation muſt not be uſed but in great neceſſity, and the ſick ſtrong prognoſticating of the danger, *Ne feſelliſſe aut ignoraſſe vide eru*: being reduced, it muſt with bandages and aſtringent fomentations be contained, with this emplaiſter upon Leather. *Rec. Emplaſtri contra rapturam unc. 2 Maſticis unc. 1 unguenti comitiſſa, deſiccativi rubei, an. unc. ſem. lapidis calaminaris in aceto extincti parum.* Or this, Take Bean-flower, and the bark of the Oke-tree, *Sanguis Draconis*, ponder of Sage, Roſe, and Myrtilles, of every one a little, ſeeth all in ſmiths water, putting thereto a little Hogs greaſe, and lay it on the place in form of a plaiſter: in ſtead whereof, you may uſe *Emplaſtrum ſtrictii cum paracelſi*, and keep the bed for the ſpace of fortie dayes: alſo this emplaiſter written by George Cufuerus, which is, *Rec. Utriuſq; conſolidæ, lancelæ, plantaginis, Cariolæ, areſta bovis vel caudæ equinæ, ſanguinariæ, pentaphilonis an. lib. ſem pullium, gallarum arabicarum, boli armenici, ſanguis draconis, raberbarum, Glandium corticum mediocrum Caſtaneæ, Virgæ paſtoris, Lenticulæ, Maſticis, Myrrhi, Mummiæ, an. drag. ſem. Sevi hirſini, Olei Roſacei, an. lib. 1 Miſceant, fiat unguentum, & cum depoſitum fuerit ab igne, ſemper agitatur cum ſpatula, donec fiat bene incorporatum*, uſing in the mean time good dyet and of light digeſtion. Abſtain from ſtrong drink, weak, and windie, meats, from hoiſting, crying, or other violent motion, ſo farre as the patient may. In the mean time, keep open the

Avic ſerm. 22 tract 3.

Alphon. ſer. 11 de ligno ſanct. Pauli. 61. ca. 65

Celſ. lib. 7.

Cufuerius de morb puerp.

womb,

womb, and lye in ſuch ſort, that the head and ſhoulders be lower than the hanches and fundament: by theſe means ſundry doe heal, when the dilatation or ruption is not great. In great dilations and people of elder age, I find no remeide, ſave only the bandage made of cloth with Cotton, Iron, or Steel, as ſhall be moſt meet: ſuch people as doe ryde great Horſes and are armed, are much ſubject to this diſeaſe, as I have often ſeen amongſt the French, Almain, or Ryſters Horſe-men: who for the moſt part have their bandages of Iron, either for one ſide or for both. *Gord Pau. Favent. Vigo.*

In this diſeaſe there is great abuſes committed by a number of unskilfull ignorant people, void of all good conſcience and fear of God, who for every ſimple kind of rupture, makes inciſion and cuts away the production of the Periton and Stone: if the diſſent be on both ſides, they cut off both the ſtones, which renders a man ſterile, and cauſeth the haire of the beard to fall: and if yong ones bee cut on both ſides, they have no beard at all, beſides they bee ever feeble and ſmall voiced like unto women, as ſaith Ariſtotle. Beſides that, oftentimes in cutting the ſick byeth, chiefly when the dilation is great. Sometimes the Inteſtine ſticketh to the Periton, which they knit altogether, and cuts away the production; after the which the ſick avoideth the excrements at the mouth, & dieth moſt miſerably. The ſtones are ordained by God for generation of mankind, and are called by Ariſtotle and Galen principall members. Heſiodorus and Conſtantinus ſay, whoſoever doe uſe theſe members lewdly and wilfully in fleſhly liking, more than is graunted for lawfull generation, doeth wrong to the Father of Light, and ſhall have no company with the bleſſed, but on the contrary the pains of hell, as ſaith Saint Ambroſe. Then ſeeing the wonderfulneſſe of thoſe parts, and the opinion which both the Divines and others of the learned, is thought of them; What ſhall we that are chriſtians think of thoſe ignorants, who altogether cut away all thoſe parts without hope of recovery, *Rol li 3 ca 35.* *Ariſtotle.* *Rol Lb 3 cap. 35 & 36.* *Barthelem.* *Gal lib 2 de diſpo memb. Heſiodorus. Conſtantinus.* *Ambroſe.*

and

and that for a little peece of mony. Such should be severely punished, and not to have company with Christians. Yet perhaps some of these deceivers will say, that I speak for malice, because I cannot doe that operation: for answer to such, I have oftentimes seen that operation done, and have divers times done it my self, the which I doe now repent in committing such a haynous sin. For satisfaction of malitious people, who perhaps may think as these deceivers doe, I will in few terms set down the form of that operation. First, The body must be purged, and bled if need require: the night before the work, the patient must eate little: the next morning about 8 or 9 hours the sick shall be laid uppon a board, in such sort, that his head and shoulders be lower than his bodie, so the Intestine shall reduce more easily, thereafter the sick his legs and thighs must be tyed fast to the said fourme or table, as also his hands, then reduce the intestine, *Omentum*, or both, within the belly, which being done, som one shall hold fast his two fingers upon the hole of discent, that it fall not, then the incisor shall stand at the side of the sick, and gripe the stone of the sore side, betwæn the thræ formost fingers of the left hand, put it up almost to the hole of the discent, and make it appeare upon the point of the middest finger, holding it fast betwæne the other two fingers, then make your incision with a bistory or rasour upon the stone that is two inches large or thereabouts. Some doe use to make this incision lower downe in the cod, next pull out the testicle and separate the *Dydimus* from the *Scrotum* till such time as you come to the hole of discent, taking hæd in ore-sore pulling, in case the nerves and muscles, Cremasters, receive inflamation, or con vulsion, and death: being so conversed nære the hole of discent, you must with a strong thread in foure-folde well waxed, knit the production so fast as may be, to the end it let the filling from the testicle within an inch of that knot, cut off the production with the testicle, then make a little incision in the nether part of the *Scrotum*, that the

Holy Abbas. Rodgerius. Theodo. lus. Al li 2. cap. 65. Bruno. Rollandus.

the matter may evacuate more easily, then apply defensives, and astringents, stay the flux of blood by cauters actuals, as counsaileth Rolandus, then use embrocations and *Compressa* in Decrete, with digestives and mundificatives till the thread fall. Therefore use incarnatives and conglutinatives, as in other wounds. If the Intestine or *Omentum* doe fall in the inner side, doe the like. Some use in place of this ligatour to sow the production with a needle and thread, thereafter doth cauterize the seaming, which oftentimes for hast or other violence, doth either slip or break, whereof come evill symptoms and often death. *Rolan. lib 3*

CHAPTER LVII.

¶ Of the rupture called *Epiplocele*.

Epiplocele is a distent of the Caule or *Omentum* in the Cod or Inguina. The Cause is not different from the precedent, accompained with much humiditie in those parts. The Signes are like the former, saving that it is softer, not dolorous, yet more uneasie to reduce. The Cure is first in God, next purge the body, and scituat the sick, as you have heard in *Interocele*: Reduce the *Epiploon*, then kæpe his bed 9 dayes: in the which he shall use fomentations astringent, with emplaisters upon Leather, made thus, Take the plaister called rod desiccative, unguent *comitissæ*, and *contrayerv uram*, of each two unc. powder of *Sanguis Draconis*, *Terra sigillata*, Mastick, Mirtils, Thuris, Nuts of Cypress, and Pitch, of each a little, whites of Eggs so many as will make all in forme of plaister, of good consistance, remove it every six dayes once, and continue the fomentation ever a little before the applying of the plaister, this order would be observed a moneth or six weeks, in which time I have often found good successe, specially in young ones: if by these remedies you profit not, the bandage must ever be used, otherwise that miserable remedie commonly practised Charlitanes and quick-silvers, as you have heard in the last Chapter. Definition. Cause. *Gelsi. 7 ca 21.* Signes Cure. *George putevious.* *Gord part. 7. cap. 7. Vigo.* *Rol li 3. ca 35.*

CHAP-

Chapter LVIII.

¶ Of the watry Hernie, called *Hydrocele* or *Hernia aquosa*.

Definition.
Paul l. 6. ca. 62. Fa. lib 6 Chir. Alb. li 2 ca 62. Gal. lib. 3. de simp cau. ca 2.

The watry Herne is a tumor in the Cods, which groweth by little and little sometime to a great bignesse in the Cod, or between the two membraines which cover the stones, called *Dartos* and *Erethroides*: sometime it is accompanied with the Gout, and is called *Hidrointercele*.

Cause.
ettius sern 4 cap 22.

The Cause is like as you have heard in Hydropsie, and is an Hydropsie particular: somtime by strokes the vessels being rent, the blood doth change into a watry humor. The

Signes.

Signes are, The tumor is clear, groweth long still in one estate, not painfull, heavie, sometime hard, and is knowen by holding the Cod betweene your eye and the candle: it is sometime inclosed in a membraine, and appeareth to be a third testicle. The

Judgements.
Fac. li 3. dera

Judgements, some resolve, oftentimes the intestines falleth with it, chiefly in the left side, by reason the melt, which is full of cold melancholique humor, that oftentimes corrupt the testicle. As for the cure of such,

George Piccolmi.

the sick must be purged with fit medicines according to the nature of the humor, use meane exercise, and meats that be hot and dry in small quantitie, drink little, and hold the belly loose, sleepe not much, use diuretick things to provoke urine, and abstain from such things as provoke wind. The

Bac lib. citato. Ench. li. 3. de med morb. Faven. cap. de hernia aquosa Paul li citato. Alo. lib. citato.

particular remedies are in using of fomentations, as in Hydropsie, next an astringant plaister made of red desiccative unguent *Commetisse*. with the powder of *Lapis calaminaris*, extinguished in Vinegar, Oere. Balust, and Bol arminie, Allom, Mustard-seed, of Euphorbe, mixe all together with a little oyle of Caunomill, and lay on the sore. If those remedies suffice not, by reason of the great quantitie of water you must put a Seton through the lowest part of the Cods, and draw it a little twice a day, till the humor be evacuated.

If

If the humor be in the membrains, that cover the Stones, make incision in the side of the Cod, eschewing the testicle, put in a tent and dresse it twice a day, keep it open till the humor be evacuated, use remedies anodines to appease the dolour, and cicatrize it as other wounds. *Theodor lib 13. cap. 36.*

CHAPTER LIX.

Of the windie Hernie, called *Physocele*. or *Pneumatocele*.

This Hernie is a collection of winde in the *Scrotum*, it causeth by an imbecility of naturall heat in those parts, and over much phlegmatick matter, with such other causes as you have heard in windy Apostumes. The Signes, The tumor is somewhat hard, light, round, suddenly engendered, possessing for the most part the whole *Scrotum* and hard, resisting to touch, clear like unto a bladder full of winde: the yard greater in one place than in another. The Judgements, If this vapour doth not dissipate, it causeth many evills: sometimes it doth possesse the whole body, and proceedeth often of matter venomous. The Cure shall be first in good diet, as in *Oedema*; next apply on the place things resolatives, as this fomentation in the beginning, thus made, *Rec. Origani, Calaminthi, Savinæ, Salviæ, Betonicæ, Rutæ, Cammomillæ, aa. M. sem. Concundantur, & buliant in Posca, hoc est in vini & aquæ æqualibus partibus, ad consumptionem tertiæ partis, fiat fomentatio cum spungiis.* After the which anoynt the part with oyl of *Euphorbe* and *Sambucini*. Some allow the plaister of *Vigo* with Mercurie or *Diapalma* mixed with Wine: also the dregs of Claret wine boyled with bran, and lay it warm to the place: if the windy tumor be with dolour and inflamation, you shall use anodines and resolatives, with such emplaister as hath the vertue to soften and resolve, and not use infusion as some doe allow.

Definition. Cause. *Gal li 6. met. & simp.* Signes. Judgements. *Paul li 6 cap 64.* Cure. *Fuven de morb. morb cap. de hernia aquosa. Vid li 3 ca. 4.* *Albu li 2. ca 66.*

CHAP-

CHAPTER LX.

¶ Of the Herne *Carnoſa*, called *Sarcocele*

Definition.
Paul. li 6 ca 63. Fauentin de med morb

Arcocele is a tumor in the Codd, and ſometime in the membrain *Dartos* and *Erethroides* chiefly about the ſtones, like a ſchirrous tumor, accompanied with vains varicous.

Cauſe.
Al li 2 ca 63 Vig li. 2 ca 6.

The Cauſe, Is abundance of groſſe humors in thoſe parts, which often corrupteth the teſticle, and laſt degendereth into an hard fleſhly diſpoſition.

Signes.
Guid. part 7

The Signes, are unequall tumor, hard, alwayes in one eſtate, dolorous, and being touched (all which is in the teſticle) doth move.

Judgements.
Guido.

The Judgements, when it happeneth in yong ones, and handled in the beginning, ſometime doth heal, but for common it is moſt difficile, and of all the eight kinds is woſt. If by feeling of it at the uppermoſt part of the Dydim it ſeemeth unnaturall great, the tumor is incurable, and better not to touch it than to attempt any cure: if you finde the Dydim ſmall, there is ſome hope of cure, for the which we muſt ſituate the ſick as you have heard, next make the inciſion in the upper part of the Cod, knit the Dydim and cauterize it, as in *Interocele* you have heard, you muſt cut a little above the excreſcence, for often it is reſidue, if any portion remain: if it adhere to the Codd, ſeparate it, and cut of the teſticle with the excreſcence: if after the inciſion there cometh inflamation and dolour, let the patient bleed, and reſt 5 or 6 daies, ſo leave the cure to give order to the accidents.

Gal 14 meth. cap 7.

Cure.
Vig. li. 2 ca 38 Celſ li 7 ca 13 Theol li. 3 c. 36 Gal. loco citat. Arno de villa nova de mala complexione Petrus Franco de Hernâ.

CHAPTER LXI.

¶ Of the Herne *Varicous*, called *Cirſocele*.

Definition.
Paul li 6 ca 64 Bac. de conſenſu medic,

Irſocele, is a tumor and dilatation of the vains that nouriſheth the teſticles, which with their membrains are full of melancholique blood.

Cauſe.

The Cauſe, Is ſome groſſe humor or melancholique blood gathered in the part, by reaſon

of

of the debilitie, lowneſſe of the part, & heavineſſe of the humor, The Signes, is repletion of the vaines, which ſometimes be few in number. otherwhiles many, and are wrapt together like unto a vine branch, ſoft to touch, and returneth into the belly by preſſing on the Didim. The Judgements are, it is without dolour, moſt dangerous and difficile to be cured, as you ſhall heare in the varicies of the legges. The Cure, ſhall be firſt in purging the body of melancholy, and blood if need be, next uſe emplaiſters and cerats, as are at length ſet downe by *Vigo lib.* 2. If by that you profit not, you muſt make inciſion in the *Scrotum* the breadth of two fingers, in the place of the varice, thereafter paſſe two Needles with double thread under the varice, one in the upper part of the wound, another in the lower, leaving an inch or thereby betwixt, then open the varice, and evacuat the humor contained. If there be divers doe the like, which being done, knit faſt the thread, and handle the wound as others, till the threads fall. If the teſticle be incerſed with many vaines, accompanied with dolour that it may not be handled, this way the Didim muſt be cut, and proceede in the cures in the Chapter precedent you have heard.

Gal. li. tumor.

Signes.

Judgements. *Gord part. cap 7. Baccha. lib. 3.*

CHAPTER LXII.

¶ Of the Hernies humerall.

Hernia humeralis, is an Apoſtume and deflution of humors in the Cod or membraines that cover the teſticles, or in their proper ſubſtance The cauſe is not different from other Apoſtumes, neither the Signes. The Judgements, ſuch are long in healing, the part being cold and membranous, the humor ſometime ſuppureth, otherwhiles reſolveth: If it continu long, it corrupteth the teſticle. The Cure, The ſick ſhall be purged by Cliſters or otherwiſe, bleede, reſt, and weare a truſſe to hold up the teſticles, and dreſſe it according to the nature of the humor and accidents, after

Definition.

Cauſe.

Signes.

Judgements.

Cure.

Net li 3 ca 38.

after the method ſet down in the generall Chapter of Apoſtumes. If it tend to ſuppuration, make your inciſion in the ſide of the Cod, as was ſhewed in *Hydrocele*, then cleanſe the ulcer and conſolidate the wound. If there remain hardnes, you ſhall (as counſaileth Avicen) take braune or grate wheat and boyle in Drymel, in the which hath bene boyled a little Amoniacke and apply it warm, and remove it twice every day; and thus much touching the eighe kindes of *Hernes*.

Rel lib. 3 ca 37

Chapter LXIII.

¶ Of the Bladder, and the diſeaſes which happen in it.

FOraſmuch as every Artiſen ought to conſider the matter and forme of that he is to worke upon: even ſo ought we to know that whereof we are to ſpeake, which is the bladder called *Ciſtis* in Greeke, and *Veſica* in Latine. Heſiodorus and Conſtantine doe ſay, that it hath that name for the taking and receiving of the water. Ariſtotle ſaith, that every beaſt that hath lounes, doth much thirſt, and needeth rather moyſt meat than dry, to ſuch the bladder is needfull: alſo thoſe beaſts which have feathers and skales, have no bladder, for in ſuch the weake ſuperfluitie doth nourith the ſkales. The bladder is compoſed of two tunickes, the one is proper to it ſelfe, the other it hath from the Periton: alſo three kindes of fibres, which are Rights, Obliques, and Tranſverſels with fir great veſſels ſet in the neck thereof, to wit, three in each ſide, a vain, from the vaine cave, to give nouriſhment; an arterie, from the great arterie, to give life, with a nerve to give feeling. The bladder is ſituate in man betweene the *Os pubis* and inteſtine, and in women betweene *Os pubis* and matrix. It hath one muſcle called Sphincter, compoſed of *Fibris tranſverſis*, which ſerve for three utilities: the firſt is, that there remaine nothing in the conduit: the

Ariſt 2. phiſ.

Heſiodorus. Conſtantine. Ariſt li 3 phiſ

Gal de facul natu. & 5. de uſu partium.

the ſecond, it helpeth to cloſe the mouth of the bladder: the third haſteneth the expulſion of the excreſcence. The bladder is a part very worthy for many reſpects, yet ſubject to ſundry griefes, like as ulcers, paraliſie, the ſtone, carnoſity, Apoſtumes, cankers, fiſtules, and divers others. In it al kind of ulcers doe engender, as in other parts: of which ſome happen within the capacity or body, others in the neck where the urine doth paſſe. The cauſes procæde of heate or inflamation in thoſe parts by the acrimony of the humor, ſtone, ſand, flyme, or ſharpe humor which hath the vertue to excoriate and corrode: alſo by ſome virulent humor or gonorhea, as you ſhall heare in my Book of the Spaniſh or French ſickneſſe. The Signes of thoſe which is in the bottome of the bladder, is continuall dolour at þ *Perinæum* or *Os pubis*, abundance of rotten matter which floweth: alſo many little pelliculs like threads of woll, which ever comes with the water: if the ulcer be in the neck of the bladder, as often happeneth, the dolour is not great, except in the time of water-making, and a little after, & the more ſharpe and hote the watter is, the greater is the paine, tention, or erection of the wand, avoyding a ſanious matter, either with or after the water. The Judgements, al ulcers in the bottome of the bladder, are either incurable, or at the leaſt hardly doe receive any cure, being a part membranous, and ſome water ever remaining, which both doth augment the ulcer and impaſſe the conglutination. Of the which if the ſick become leane & atrofied, ſpecially in the thighes, death doth haſtily approach. Some ulcers do happen in the neck of the bladder: of which, ſome are curable, others very difficile, by reaſon of the continual paſſage of the water. The Cure conſiſteth in generall and particular remedies, as in good forme of diet, abſtaining from things of evil digeſtion, and ingendereth wind, from all ſoure, ſharpe, bitter, ſalt, and hote things, from wine and all ſuch things as hath the vertue to make þ blood ſubtil, eat bread of good white wheat wel baked, tender fleſh, as Mutton, Veale, Kidde, fœte of

Cauſe.

Signes.

Judgements. *Hip. li. 6 ſca. 28*

Cure. *Xan. de curan. morbis*

Calves, or Mutton, young fowles, and ſuch like brothes of fowles or Mutton, with Plumdamas, Lettice, Poppie, and others of like quality, hold the belly ever loſe, either with purgations or gliſters, the gliſter may be thus made, take a ſheepes head, and ſeeth it till the fleſh come from the bones, then ſeeth in that broth flowers of Cammomill, Melilot, & Mallowes, of each one handfull, take a pound of that decoction, with two yolks of egs, and ſome common oyle, and make a Gliſter, which may be uſed either in the morning or a little after Supper. In like manner this *Bolus* may be uſed every eight dayes once, made thus, take *Caſſia fiſtula* recently drawn out of the Reed 8 drams, Rubarbe ſubtilly pulveriſhed 2 drams, the electuary of Dragagant, of the which you may make a *Bolus*, thereafter reſt a day or two, then take Terebinthine of Venice 3 drams, that is well waſhed in water of Ciccory, Roſe, Paritary, or Scabious, which may be taken in Roll with powder of Liccoryſe, or diſſolved with the yolke of a new laid eg, and white wine, or Cowes milke, then uſe this injection three or four times a day with a Siringe thus compoſed, take red Roſes, Plantine, Barley and Abſynth, of each a handfull, Centory halfe a handfull, make a decoction to the quantity of a pound, in the which you ſhall diſſolve 2 ounces of hony of Roſes. After you have uſed this a certaine time, you may uſe this, Diſſolve in the former decoction, Aloes 2 drams, Myrrhe 1 dram, *Ariſtolochea rotunda* in powder, 1 dram and a halfe, of the which you ſhall make injection and uſe three or foure times a day: Then uſe things to dry, conglutinate, and pacifie paine, amongſt the which I have found great effects in this which I call *Aqua caleſtis* and doe commonly uſe it in ſuch caſes: the forme whereof is this, Take a quantity of whites of egs, and beat them long in a baſon, then let them ſtand a little til the water remaine at the ground, then mixe as much Plantine and Roſe-water, with a little Camphire and Troſſiques of *Raſis*, or in place of theſe Troſſiques, a little Lytharge of Gold, Ceruſe, and a little

Lenit.

Injection in the neck of the Bladder.

Conſil. Fernel

Injection called *Aqua calestis.*

a little Bol armenie, with a very ſmall quantitie of græn Coppreſſe ſubtilly pulveriſhed, paſſe it through a cloth and make your injection, the which may be continued till the ulcer be whole. At any time the pain be ſore, you ſhall make injection with a little warm milk. As for Paraliſie, or weakneſſe in the neck of the blader, you ſhall uſe fomentations, nervals, emplaiſters, and linements, which have the vertue to corroborate and comfort. Alſo you may uſe the balm of John de Vigo, and Guydo *ad Paralyſme*, with ſuch other remedies, as you ſhall hear in the generall chapter of Wounds, intreating of that matter. As touching the extraction of the ſtone, it requireth a long diſcourſe, for the which I mean to deferre it to the Poor Mans guid. In the mean time, the skilfull Chyrurgion may take advice with Marianus Sanctus, Parcus, Petrus Franco, and divers others, who have learnedly written of that matter.

Balme of *John de Vigo.*

CHAPTER LXIIII.

¶ Of the Wand or Yard, and certain Diſeaſes incident to it.

IT is ſaid by the learned Philopher, that Man doth many wates paſſe Women, but chiefly in one particular member, which is called by the Græks *Caules*, and by the Latines *Mentula* or *Virga*, it is a part nervous, ligamentose, concave or fiſtolous, compoſed of a ſpongious fleſh: It is ſcituate on the neck of the blader, and hath the originall from the *Os pubis*, in it is the conduit of the ſæde and urine, upon the which there is a concave nerve, which being full of ſpirits or wind, doth make the erection of the wand, it hath vaines and arteries, with three muſcles one on each ſide, and the third in the middeſt, which do goe to the midſt of the Prepuice, and doth hold the wand ſtreight after the erection in time of copulation: the top of it is ever of one bigneſſe, and is called by the Græks *Balanus*, and by the

Gal. li 5 & 16 de uſu par & 6 loc affect ca. 6.

Gal. li 4 de uſu partium.

Latines *Glans*: in the which gland the nerve cavernou doth not enter, it hath a little skinn that covereth it called *Preputium*: yet Ariſtotle is of opinion, that that skinn hath no name. The wand is one of the cheif inſtruments that ſerveth for generation, and is ſubject to divers diſeaſes, like as tumors, inflamation, Apoſtumes, Windes, Ulcers, Cankers, and ſuch like, for the which have your recourſe to the proper chapter intreating of thoſe things. It is likewiſe ſubject to carnoſities, with certain ulcers and other affections, as you ſhall hear in the next Chapter. The carnoſitie or caruncle is an excreſcence of ſuperfluous fleſh that groweth in divers parts of the canell of the wand, and neck of the bladder, impalling the free paſſage of the ſeed in Man, and urine in both ſex. The Cauſe proceedeth by hot inflamation or ulcer in thoſe parts; alſo by heat and acrimonie of the water, by ſands, ſtone, rotten ſlime, or filthy humor, but oftenneſt by a ſharp bitter humor which diſtilleth from the glands proſtrates, which doth excoriate & corrode theſe parts. Sometime it doth proceed of a malignant rotten virulent humor, as you ſhall hear in the Book of the French ſickneſſe. The Signes are known by the ſonne or Catheter; alſo by the difficultie and ſtopping of the water, which ſometimes cometh forth like a ſmall thread, otherwhiles forked, with two branches, at times it doth iſſue, drop, and drop with ſuch vehement dolour and preſſe, that oftentimes the excrements doe avoid. The Judgements, they never doe heal of themſelves, and are very difficile to be cured with medicaments, chiefly ſuch as are old, callous, and hard. The Cure conſiſteth, Firſt in purgations and bleeding, ſpecially of the caruncle it ſelf, the bleeding doth diſcharge it: alſo in the uſage of things that have the vertue to correct the acrimony or heat of the urine; next, if it be hard and callous, you muſt uſe fomentations, linements, cataplaſme, and plaiſters to ſoften it, as you ſhall hear at length in my Book of the French ſickneſſe. The fomentation or cataplaſms be made of Althea, Letice, Byrons,

Gal lib. 6. ca. 6 loco affect. & li. 2 de ſem. & 14 de uſu par.

Gal. li. de locis affectis.

Cauſe.

Signes.

Judgements.

Alphon. Ferrus.

Cure.

Bypone, Violets and Paritare, Lyntſæd, Fenegreke, flowers of Cammomill and Melilot, boyle all in water or Milke, and foment with ſponges morning and evening: that being done, dry the part and annoynt it with this liniment made of *Axungia humana, unguenti de Althea, Agrippa* mired with oyle of Cammomill and Lyllies, uſing ſometime the plaiſter of *Vigo ſine Mercurio*. The caruncle being ſo ſoftned and prepared, it muſt be corrected and taken away with medicaments proper for that effect, as thus, take the unguent of *Roſatum, Meſnes*, halfe an ounce, powder of *Alumen uſtum*, Mercurie, Savine and Ocar, of each a little, mire all together and make an Unguent: alſo the ſcumme of honey, being burnt and put in powder, and mired with a little Cerote or oyle of War, doth in ſhort time conſume the caruncle, being applyed thereto: Alſo *Pompholiges* well waſhed and mired with a little Savine and Ocre well pulveriſhed, burnt ſhelles of Egges, *Antimonij crudi*, and *Albumen Ruſi*, well pulveriſhed and mired together: for this purpoſe I commonly uſe *Roſat Meſnes*, with a little Sublime, and doe apply it upon a little Ware candle, to the bigneſſe of a little ruſh, which ſomtime muſt be inrolled with a fine ſmall linnen cloth, thereafter annoynt it with the ſaid unguent: the cloth cauſeth the unguent to adhere better than the ſimple candle, til it come to the place of excreſcence or carnoſity. I doe often times uſe in the place of this candle a little tent made like to a point horn of fine linnen cloth, ſewed with a needle and ſmall thread, of the which there muſt a portion remain at the ſaid tent, to pull it out if need be. After it be thruſt unto the part affected, with a long ſmall ſound of ſilver: this tent doe I annoynt with one of the foreſaid unguents, and dreſſe it twise or thrice a day. If the caruncle be painfull, I make the unguent more weake, in adding fewer of the powders, and ſometimes uſing injections that have the virtu to pacify the pain, which ſometime may be done with warme milke only. This method doe I follow untill the caruncle be conſumed, there

Divers remedies to conſume the Caruncle.

after with dying unguents and injections I dry and ſic catrize theſe ulcers. For the which purpoſe I do commonly uſe the water ſet down in the laſt chapter called *Aqua celeſtis*; by theſe means I have cured ſundry: Divers other remedies you may find in my Book of the French ſickneſſe in the Chapter of Caruncle.

Chapter LXV.

¶ Of certain other Diſeaſes of the Wand.

BEſides ſuch diſeaſes as you have heard in the precedent Chapter, there happeneth likewiſe certain other diſeaſes, like as cloſing of the prepuce called *Phymoſis*, retraction, or ſhortning of the ligament called *Canitum vinculum*, Warts, Tumors, Glandules, involuntary erection called *Priapiſmus*. Of which (all) I ſhall briefly ſpeak, beginning at the cloſing of the prepuce, which happeneth either by nature from the firſt confirmation, or by accident, like as ſiccatrizes of ulcers, of the prepuce that covereth the Wand head, when it is altogether cloſed, or at the leaſt hath ſo little paſſage, that neither ſeed nor urine can freely paſſe, nor the gland called *Balanus* be diſcovered. The Cure ſhall be to open and dilate the prepuce with the poynt of a ſharp chizell or biſtorie, then hold a tent of lead or tree in it for certain dates, that it conglutinate againe, anoint alwaies the tent with oyl of ſweet Almonds: ſometime it happeneth that Children are born, and the fundament cloſe, which likewiſe muſt be cut or rent with the fingers, ſuch children are of ſhort dates. I have ſeen the hole of the prepuce lower than the point of the gland, which made that the ſeed could not go right to the matrice, neither the urine avoid directly away, except the Wand had been turned upward toward the belly part. For the Cure whereof I have dilated or inſitted that part, to the place where naturally it ſhould be, and hold it dilated for a while, & cure it as other ſimple wounds: it happeneth alſo that ſometimes the lyget called the bridle

Phymoſis.
Acta. Lonicer. explt. morb.
Signes
Alb. li. 2. ca. 55.
Haly Abbas.
Cure
Celſ. li. 7. ca. 25
Paul. 6. ca. 54

of

of the wand is ſo ſhortned, that it maketh the wand to turne back and not ſtraight, in ſuch ſort, as it were a convulſion: the which impaſſeth the ſeed to go rightly to the mother: for the cure of this, the ligament muſt be cut as that of the tong in yong children, and cure it as other ſimple wounds: ſometime betwixt the prepuce & *Balanus*, there are excreſcences or ſundry warts which doe proceede in having company with women in time of their moneths, for taking away whereof, you muſt uſe powder of Sabine, & Dere, well dried and ſubtilly pulverithed. Sometime there happeneth little tumors glandulous outwardly by the ſide of the prepuce, to the bigneſſe of a Racket or Tenniſe ball, impaſſing in any ſort the company with women, ſuch muſt be knit with a ligatour, as you have heard in the Chapter of *Paraulis*. The involuntary erection of the wand, called by the Latine *Priapiſmus*, which is a diſeaſe contrary to *Satiriaſis*: for *Satiriaſis* is a continual erection of the wand with delight of concupiſcence: and *Priapiſmus* is an erection without appetite or carnal luſt. It doth proceed of wind or vaporous ſpirit in the nerve cavernous of the yarde, or by the dilation of the artier thereof; alſo by lying on ſoft beds chiefly on the back, eating and drinking of vaporous things. Alſo by thicknes and cloſenes of the pores, it is moſt dangerous if ſpeedy remedy be not had. For the Cure, purge, draw blood, abſtain from ſtrong drinke, and all ſuch things as engender winds or vapours, annoynt the yard and reines with juyces of cold herbs, cold lineaments made of *Cerat galen, ſanguis draconis, ſempervivum*, vinegar and ſuch like: apply to the loynes a cake of lead annoynted with quick-ſilver, foment the yard with decoction of *Agnus caſtus*, Roſes Camomill, Penyroyall and Melilot, with ſuch other remedies as is ſet downe in the Chapter of windy tumors. Divers other remedies for this purpoſe, are ſet downe by *Galen* 14. *method. cap.* 8. & 9. *de compoſit. medicam. cap.* 9. *Aetius ſerm.* 8. *cap.* 32. *Avicen fol.* 20. *cap.* 29. and divers other old writers.

Tra. li. 9. ca. 9.

Paul li 6. ca. 59
Paul li. 3. ca 56
Tra li 9 ca 10.
Gal. li 6. de male affect. loc. cap. 6.

Cure.

Gal. par. 7.

Chapter LXVI.

¶ Of the Tumor in the Inguine or Liske, called *Bubo*.

Definition. *Gal. li. 5. cap. 12. & 2 ad glau. & 3. meth.*

THis word *Bubo*, is taken in this place for that tumor which is betwixt the thigh and the body, called in Latine *Inguen* in the which place there is sundry little kirnels or glands, which sometime doe swell & tumifie.

Cause.

The Cause is a desluxion of humors in those parts, violent exercise strokes, crysis of maladies, dolours, or ulcers in the thigh, legge, or feete.

Judgements *Gal. 13. meth.*

The Judgements, such as happen by cryse of sickneſſe, are difficile, but if neither fever, nor vapour venomous hath proceeded, it is more easie to be helped.

Cure.

As for the Cure, sometime it doth resolve, otherwhils it suppurateth, for the which follow that Cure which you have heard in the Chapter of *Scrophula*, and other Apostumes which happen in parts glandulous. There be other certain glands a little lower down in the thigh, where ordinarily doth engender the Plague, whereof (God willing) you shall heare the Cure in the Booke of the Plague.

Chapter LXVII.

¶ Of the Tumor or pain in the Hanch or Huccle bone, called *Ciatica*.

THis disease (which commonly doth possesse the joynts, by the falling of some humor above nature betwixt the joynt bones) is called by the Latines *Morbus articularis*, and in vulgar the Gout, of the which there be divers kinds and names according to the joint which is diseased, as for example: that which occupieth the jawes, is called *Schagonogra*: if in the Neck, it is called *Trahelagra*: in the Backe, it is called *Rachiragra*: that in the shoulders is called *Omogra*: that in the Clavicules, is called *Clersagra*: that

that inthe elbow is called *Pethyagra*, that in the hands is called *Cheiragra*, that in the foot is called *Podagra*, and that in the Hanch is called *Ischias*, that in the knées is called *Gonagra*: here I shall content me only to speak of the last two, because they be most common, the others I leave to the learned Physition, as matters more Physicall than Chyrurgicall. *Apho.* 6 & *com.* 49.

The disease which is called *Sciatica* proceedeth partly by the usage of such meats as ingendereth Phlegmatique humors, also a defluxion of grosse congealed humor, which possesseth the joint of the hanch bone, which partly doth proceed for want of exercise, as also sometime by immoderate using of women, stopping of the hemorrhoides or monethly courses. Definition. *Pa. l.* 3. *ca* 77. Cause.

The Cure, Is first in good diet, using things of good and easie digestion, purging the grosse phlegmatique humors by laxatives and vomiters, letting blood of the Saphin vain of the fore side, application of fomentations, apparatives and resolatives on the part, ventosies, with scarrifications, vesicatories good to break the skinn, with such plaisters and liniments that have the vertue to heat and resolve: in the mean time kéep ever the belly lose, with moderate exercise. To some persons I have used decotions sudorifick made of *Gaiac* and *Salsa parilla* morning and evening for a certain time, which doth provoke sweat: after the which the body being well dryed, I have ever used this linement, to wit, *Rec. Axungiæ humanæ, anseris, Gallinæ, medullæ cruris vituli, cervi & bovis, an. unc.* 2 *olei vulpini, unc.* 32 *liquefiant simul cum aqua salviæ chimici ive arthetice an. drag.* 1 *sem. olei de cera drag.* 1 *misce simul adde sub finem aquæ vitæ unc. sem. fiat lirementum.* wherewith you shall anoint the hanch, thigh, and leg, apply above it black shéeps woll, as it cometh from the shéep: by the continuing of this certain dayes, I have cured divers: also oyle wherein Frogs have béene boyled till the flesh be separate from the bones, with the which oyle rub and annoynt the sore place, which is an excellent remedy as saith *Mizaldus*. Cure. *Mizaldus.*

To

To others in whom those remedies have not profited, I hav applyed cauters either in the inside or outside of the leg under the knæ, containing a bullet or pie therein for a time, till the humor did evacuate and the sick becomes well: some doe use to apply two or three cauters on the sore part, by the which meanes divers times I have found good successe.

Rol li 4 ca 12 Sundry other remedies are set down by the learned, but by these onely have I ever found best helpe.

Chapter LXVIII.

¶ Of the tumor or pain in the Knees.

Gal com. in aphor 74. li 4 & 6 epid.

Cause.

Signes.

Judgements.

Hippo Prog. cel li 4 ca. 23

The tumor or paine in the knæ doth proceed either of congestion, defluxion of humors, or by strokes, falls, crysis of sickneſſe, long travell, ryding, heat, cold, or by long diseases. The Signes, are manifest. The Judgements, such as happen after long sickneſſe, are difficile and dangerous, or at the least long in healing: the legge and the thigh oftentimes become atrofied, extennat, painfull, and dolorous, the humor being either hote or cold, sometime there is virulencie and malignitie in the humor, which is under the little bone of the knæ called *Rotula* which sometime causeth the joynt to disjoyne, and the *Rotula* turn quite over, as once I did see at Paris.

Cure.

The Cure whereof did consist in universall and particular remedies: the universall shall be according to the qualitie of the humor, as is set down in the generall Chapter of tumors. The topicall or particular remedies shall be in the usage of repercussives, discutients, and drying things, according to the nature of the part, which shall be distinguished according to the degrees of the Apostume, as you have heard in Phlegmon. If it tend to suppuration, beware to open it, it is forbidden by our ancients to make deepe incisions under the Rotule of the knæ, because those parts are both sensible and painfull, and oftentimes evill accidents ensue; so you shall use remedies corroborative,

Avicen. Henricus.

roboratives, and anodines, evacuating the matter, and sicatrizing the wound, as you have heard in others. Sometime the tumor is engendered of winde: if so be, you shall cure it as you have heard in watry and windy Tumors.

CHAPTER LXIX.

¶ Of the tumor in the vains of the Leggs, which is called *Varix*, and by the Greeks *Cirsos*.

Varix is a dilatation of the vain, greater than naturall it should be, which happeneth in divers parts of the body, as on the temples, belly, under the navill, on the testicles and matrix, but chiefly in the leggs, and happeneth sometime in one vain only, otherwhiles in divers together, tumified and full of a thick burnt melancholick blood, letting the action of the place. The Cause is abundance of melancholeus humor, retention of moneths in women, and hemorrhoides in both seres, which dilateth the vains, and sometime doth break them, as happeneth sometime to women in their travell, the which I have entreated at length in my Booke of the diseases of women. It proceedeth also of vehement exercise, as leaping, wrestling, carrying of great burdens, strokes, falls, torments, and too much standing, great travelling on foote, and such like. The Signes are perceived by the greatnesse of the vaine, which commonly are more tumified and blacker then the naturall. The Judgements, such as are intern are incurable, so not to be touched, because it letteth the flurion, so remaineth and goeth to the noble parts, causeth great accidents, they entertaine old ulcers, and letteth the cure of them. The Cure, is first in good diet, abstayning from things that ingender melancholy: some doe use when the varices are little only, to comfort the part that the humor descend not, neither be so easily received by the part: also to apply playsters above the

Definition. *Iac. de Ca. 82. Vesal. li. 3. of Ornamen. Lori expl. cir.*

Cause. *Avicen.*

Signes.

Judgement. *Guido part 7. cap. 20.*

Cure. *Rasis lib 9.*

Rolandus.

Pa. loco citato the knæ, to intercept the humor made of Bol arminic, *Terra ſigillata*, Nuts of Cypr̃us, Galls, *Hypeciſtis*, Incenſe, Dragagant, Barley, or Bean-flower: alſo the plaiſter called *Contra rupturam* is very good, with the uſages of ſtrait bandages from the foot to the knæ, ſopped in ſad Claret Wine, or ſome decoction aſtringent: let the ſick uſe little travell, hold up the legs: if by thoſe remedies the diſeaſe cure not, ſome counſaile to inciſe them in divers places according to the circumvolutions, and let them bleed to the ſoyce of the ſick, then cloſe them up and bind the wound with a compreſſe and band wet in Claret wine and water and handle the wound as other bleedings: but before you bleed, you muſt foment the legg with hot water, to make the groſſe thick melancholick blood become more thinn, as alſo to make the vains more tumified reſting that day, and if they doe ſwell again, doe the like within two or three daies after, the place alwaies being firſt marked with a little inke on the skin above the vain, thereafter take up the skin with thy hand to diſcover the vain: make the inciſion in the middeſt thereof, then let the gripe goe that the vain may be ſeen; then paſſe two needles as you have heard in the herne varicous, let it bleed a quantitie, tye it faſt, let the thread fall off it ſelf without drawing of it by force, and cure the wound as others. Some for this purpoſe doe uſe the actuall cauter, whereof I have found evill inconveniences to enſue, for the which I uſe only to apply a potentiall cauter above the skin in the varice, which doth not only burn the skin, but alſo the varice, which done, I let the eſcharre to fall off it ſelf, without any applying of medicament or inſtrument, ſave only a little freſh butter, untill the eſcharre fall, and the vain conglutinate of it ſelf, as I have often proved.

Celſ li. 7. ca 31

Fuch li 7. de med morb. cap. 8.

Cbe. li. 1. ca. 58

CHAP-

CHAPTER LXX.

¶ Of the little tumor in the Leggs, called *Dracunculus*.

Dracunculus is a tumor or extraordinary dolour that is bred in the leggs or armes, and is called *Dragoneus*. Definition. *Paul. l. 4 ca 83. Avi. l. 4 ca. 21*

yet divers Authors have given it divers names, as Avicen calleth it *Medeu*, by the name of a Town where it is most frequent. Albucasis calleth it *Vena civilis*. Haly Abbas *Vena famosa*. There is great difference touching the Cause and Cure of it. It chanceth most commonly in the high parts of India and Ægypt, and is not often seen among us; yet somwhat I will say of it for the better instruction of the young Chyrurgion. Paulus and Avicen are of opinion, that in the place affected, the humor is like unto little worms: sometimes great, otherwhiles small, chiefly in the parts musculous, as in the thighs, and leggs, sometimes in childrens sides under the skinn, with manifest motion. The Cause is a sharp mordicant humor, betwen the flesh and the skinn, which in time wareth hard like a nerve or tendon, and not a vegetable thing as some dos imagine: these kindes of tumors are thought to have some venenositie with them, and is ingendered of an hot melancholy blood, and burnt phlegm, sent through the vains to the exterior parts by the vertue expultrix. The Signes, Are vehement dolour, Judgement. *Pa. cap. citato. Adamus Lonl. Swanus. Alb. li 2 ca 92.* Cause. *Faver. de puer. morbis cap. 12. Monard. li 7.* Signs.

function, tention, varicous, anfractuosities, fever, hardnesse, round like nerves, and seeming to move in touching as if it had life. The tumor is long, and stretched from one joint to another, as from the knee to the foot, from the shoulder to the elbow, from that, to the part of the hand called the carp, with such intollerable pain that hardly can be suffered. The Cure, Whether it be humor or animall vegetable, is to foment the place with milk wherein Cammomill hath bin sodden, or a little Aloes, dissolved, with some medicaments to appease the dolour, then to give ayre Cure. *Rasis tract 7. cap. 24.*

either

either by cauter or by viſſecator: If it be not dolorous, and tend to ſuppuration, cure it as you have heard in *Eriſipila* and *Phlegmon*, changing your remedies according to the times of the tumor and humor predominant, as you have heard in their proper Chapters.

Chapter LXXI.

¶ Of the tumor in the Legs or Arms, called by the Greeks, *Elephantiaſis particularis*.

Definition. *Gordon part 1. Arti. 2. brevi. cap. 46.*

This diſeaſe which is called *Elephantiaſis*, if it be univerſaly through all the body, it is called Leproſie, and by the Arabians *Malam ſanctæ mamæ*: but if it be particular, it occupieth only one member, which ſpoyleth the form, figure and diſpoſition thereof, and maketh it rough, ſcurfie, red and unequall, like the skinne of the Elephant, for the which it is called *Elephantiaſis*: if it poſſeſſe the skinne and not the fleſh, it is called *Morphea*. The Cauſe, commeth either from the Mothers womb, and is called Paladie hereditary, or after we are born. If in the Mothers wombe, the child hath bin conceived in the time of monethly purgations, or elſe the Mother or Father hath bin elephantick. It happeneth alſo after we are born, and cometh either of the corruption of the aire, by dwelling in places nær unto the Sea, which makes the humors more groſſe and thick: alſo by dwelling in hot Countries, as in Spain, Affrick, and in others, where many are infected; alſo in cold parts which thicken the humors. Likewiſe by great plenitude of the melancholique humor, or burnt choller, retention of the hemorrhoides or monethly courſes, defection in the milt, uſage of melancholique meats that are hard of digeſtion, ſuch as Swine, Goates, Hares, and divers others: alſo by having companie with ſuch as be Elephantick, drinking after them, receiving their breath or ſweat, the continuall uſage of milk, ſtrong wines, drunkenneſſe, glutton-

Cauſe. *Palmarius Conſtanti. Affric de Elephã*

Pa. li. 4 ca. 1.

gluttony, ſadneſſe, feare, melancholy, with all ſuch things that thicken, heateth, or burneth the blood, or participates with a malign quality. The Signes, is great tumor poſſeſſing the whole member or ſome part thereof, and doth augment by little, and little inſenſible, not dolorous, ſometime inflames, the eyes troubled, the breath evill ſavoured, the ſkinne rough, knotty and unequall, hard and ſcurffy; at laſt the body becommeth atrofied and leane, the bones tumefies, the hands and fingers become ſwelled, and the ſcete deformed. The Indgements, either being univerſall or particular, it is incurable, yet ſome remedies palliatives may be uſed to let and ſtay the malladie for a time, chiefly by purging of the melancholique humor, bleeding, bathing, ventoſing, provoking of the hemorhoides and the monthe, uſing good regiment in things that ingender good blood, abſtaining from things of contrary qualitie, the which muſt be done by the advife of the learned Phyſition, or by ſuch as have written of that ſubject, like as Palmarius, Paulus, Fernelius in his Counſels cap. 68. & 69. Chelmereus, Celſus, Pareus, Conſtantinus, Affricanus. with divers others. If there be inflamation or heat, uſe ſuch remedies as are ſet down in the Chapter of Phlegmon I have knowne ſome infected with this maladie, who did live more than twentie yeares by uſing good regiment.

Signes. *Palæo. citato.*

Indgements. Cure. *Celſ lib 3. ca 25.*

Fer conſil. cap. 68. & 69.

CHAPTER LXXII.

Of the tumor which commeth in the extremities of the fingers, called *Paneris*, or *Paranychia*.

Definition. *Gordo part. 1. cap. 28. Tocaan. lib 3. Al li 2. ca 81*

This hote tumor or Apoſtume which doth poſſeſſe the extremities of the fingers, and roots of the nayles of the toes, is called by the Græckes *Paranychia*, and by the Latines *Reduvia*. The Cauſe, is melancholique humors, malignant, venomous, of a moſt hote nature which proceedeth from the bones, nerves, tendons, and membraines that

Cauſe. *Alli 2. ca 89. Vigo lib. 2.*

that cover them. The Signes are vehement dolour, the which maketh the ſick almoſt byſide himſelf, accompanyed with fever, inflamation, and dolour, and other evill ſimptomes, as in Carbuncle. Guydo and Vigo doe call it a cruell, abhominable, and moꝛtall diſeaſe, they repoꝛt to have ſeen ſome grievouſly toꝛmented, and dye thereof The Judgements, it is ſometimes ulcered, avoyding a virulent matter, and is very dangerous, and divers times beꝛoꝛe there be any outward appearance on the fleſh, it rotteth both the bones, ligaments and membꝛaines, ſo that there is no remedy but amputation, in caſe it infect the reſt. The Cure, firſt, the ſick ſhall be purged, and bleed in the arme oppoſite, in the meane time uſing good regiment, abſtaining from ſtrong dꝛinke, as in Phlegmon. The topicall remedies are diverſly ſet down by the old wꝛiters: ſome counſaile repercuſſives, anodines, and ſuppuratives: others, foꝛ the greatneſſe of the diſeaſe, counſaileth not to abide the maturation, but preſently to make inciſion on the ſide of the joynt affected: the length of the ſaid joynt penetrating to the bone, to give iſſue to that venome which is commonly betweene the periоſt and the bone, let it bleed til it ſtanch of it ſelf. *Vigo* counſaileth, to apply the actuall cauter, foꝛ it hath a mighty virtue in coꝛrecting of the malignity and venenoſitie which offend the nerve and bone, alſo doth pacifie the vehement pain, which being done, the ulcer muſt be cleanſed with Egyptiacke and *Aqua vita* mixed together, oꝛ a little *Apoſtulorum*: In this caſe I never open it beſoꝛe it come to maturity, let it bleed, then waſh it with *Aqua vitæ*, well rectified, and mixed with a little Theriacke and Pithꝛidace, thereafter I apply about the part a cataplaſme of the leaves of Henbane, and *Mandragora* roſted under the aſhes, tꝛ mixed with a little butter oꝛ Hogs greaſe, oꝛ in place of it Popilion, *Roſat Meſmes*, oyle of Roſes to appeaſe the dolour, with ſuch other remedies as are ſet down in the Chapter of Carbuncle: Thereafter pꝛocure matter, mundifie the ulcer, and ſiccatrize it as you have heard in others.

Signes. *Celſ. li 6. ca 18.*

Guydo *John de Vigo.*

Cure. *Vigo lib. 1.* *Guielmus Placentinus.* *Chelm. enchir. li. 1. cap 39.* *Vigo li. 2. cap.* *Petrus Bairus in ſua practica.*

Petrigmis

Pterigmin is an excreſcence of fibres under the nayles of the fingers or toes, chiefly in the thumbe or great toe, it looſeth the ioynt of the nayle, and maketh it to fall, ſometime corrupteth and rotteth the bone: for the Cure you muſt uſe ſuch remedies, as in ulcers, with corruption of the bone, yee have heard.

Chapter LXXIII.

¶ Of the little excreſcence which cometh commonly in the hands or other parts, called by the Latines *Verruca*, and by the Arabians *Boturala*, in vulgar *Warts*.

There happeneth oftentimes in the hands little excreſcence or Warts of divers formes, and are for the moſt part incommodious, painfull, unſeemly, impeding ſomewhat the action. They are of divers kinds, which all or either of them doe infect the part where they are they are ingendered of a melancholique pituitous blood. The Cure is divers, according to the nature of the excreſcence, ſome of them be knit, others be cut, ſome conſumed with corroſives; ſuch as be ſmall at the roote, may be knit with Horſe-haire, thread, or ſilke well waxed, and wet in ſtrong water, or oyle of Sulphure, tyed every day faſter then other: the hard tying letteth the nouriſhment, and cauſeth it to fall more eaſily: Such as be large at the roote may be cut with a Razor or ſharpe ſheares, letting them bleed well, then apply a little powder of Bolarmenie, or *Terra ſigillata*, with a little Allom water: Such as be very hard without great feeling, may be conſumed with oyle of Vitreoll, ſtrong water, or powder of Arſenicke, then apply defenſitives of Boll, with Roſe and Plantine water, or Oxycrate: Others which be more tender and not dolorous, may be conſumed with the powder of Sabine and Ocre, well dryed and ſubtilly pulveriſhed, or with a little black Sope and Salt mixed together, others doe

Definition.

Celſ. li 5. ca 28.

Cauſe.

Paul. li 4 ca. 15.

Cure.

Arnald. lib. 2 breu. cap. 45. Bru. li 2 ca 14.

Guid. part. cap. 10.

Gal li. 3 ca 33 Baptista porta Rossellus.

conſume them with powder of *Aſphodelorum* and *Hermodads*. Baptiſta Porta doth much approve the head of an Eele, cut and rubbed with the blood thereof. Roſſellus commendeth the red Onyon wel bruiſed with Salt, and rub the Warts therewith; alſo the powder made of hony, ſet down in the Chapter of the Caruncle of the Wand, otherwiſe you may take Agrimony, a little Salt, Vinegar, and bruiſe al together and annoynt the Warts, the dregs or lees of Wine burnt, or the rootes of Oyſters doe the like.

Chapter LXXIIII.

¶ Of the Tumor or Ulcer in the Heels called *Mula*, *Kybs*, or *Chilblanes*.

Paul li 3 ca 79 Celſ li 5 ca 28

Cauſe.

This tumor, little ulcer or excreſcence, which oftentimes happeneth in the hands and feete, chiefly in the heels of young Children in the Winter ſeaſon, are called by the Greeks *Chimethla*, and by the Latines *Perniones*, are very noyſome, and doe commonly proceed of cold, uſing of ſtrait ſhoes, and filth on the feet and heels. For the Cure whereof Avicen counſelleth to make embrocation with hats water, or *Aqua marina*, which is water and ſalt mixed together, alſo a lavament made of powder of Dragagant, with oyle of Maſtick, or you may make a liniment of Goats greaſe, with a little powder of Nutgaules: otherwiſe, take two ounces of the marrow of Neats feet, with halfe an ounce of *Galbanum* mixed, and apply to the ſore: in like manner you may foment the ſore with the decoction of the roots of *Ciclamen*, or *Navets*; as alſo *Ciclamen*, or *Raphards*, roſted under the aſhes, and mixed with a little ware, and apply it in forme of a plaiſter or cataplaſme: if the ulcer be large, apply ſome gentle mundificative or *Apoſtolorum*, thereafter *Unguentum album*, powder of Maſtick, Incenſe, & Myrrhe, with a double cloth wet in warme Claret wine, ſo hold it warme.

Cure.

Avicen. Celſus citat.

CHAP-

CHAPTER LXXV.

¶ Of the little hard Tumor in the Feet, commonly called *Cornes*.

THose hard callous tumors which commonly possesse the toes and soales of the feet, but chiefly the joynts and under the nayles, are called Cornes, and in Latine *Clavus*, of the which there are three kindes, to wit, *Corpus*, *Callus*, and *Clavus*. The Cause, Is chiefly in wearing of strait shoes, superfluous excrements which cannot avoid, so remaineth in the nervous part, and requireth a certain hardnesse, according to the nature of the part where they are. The Signes are evident to the sight. The Judgements, Is great dolour, with impassing to walk or travell, they happen sometime after contusion. The Cure is, That those that are little and not deep, may with a sharp Bystorie, be cut at the root; but before they be cut, I use to apply to the Corn a little peice of fresh Veal of the bignesse of six-pence and tye it to the Corn a whol night, it doth mollifie it, and maketh it more easie to be cut, which being done, I fill up the hole with a little of that sand, which ordinarily doth rest in the bottome of the Chamber-pot, it letteth the growing of it again, being finely taken out at the root. Lebot commendeth much the applying of a Cowes gaul, which maketh it to fall out at the root: some after the Corn be softned, either by fomentation or peice of Veal, doe apply powders made of the root of *Arista longa*, otherwise little roots roasted under the ashes, and beaten with *Axunge* and apply it to the Corne, which maketh it to fall in three or foure dayes, then fill up the hole with a little Wax or greene Copres, or a little of that sand which remaneth in the ground of the urine. In cutting of it, goe not too deep amongst the ligaments and tendons, for the great accidents that sometime doe follow, as inflamations,

Definition. *Celsi li 5 ca. 28.*
Difference. *Paul. 3 ca. 80.*
Cause.
Signes.
Judgements.
Cure. *Theodor. lib 3. cap. 39.*
Lebot li. 3. of Ornament.
Paul li 6 ca 87.

Petrus Bairus.

mations, convulsions, and gangrene, by the which some have loſed their toes and feet, by cutting a part of it, the root groweth more large; ſo it is beſt to foment the part with water of Mallowes, and Althea, or water wherein Trypes have bein ſodden: thereafter uſe Gumm Ammoniack, diſſolved in *Aqua vitæ*, and lay on it: or this which I doe uſe made of like quantitie, of Turpentine, Ware, and Verdigreaſe, called *Ærugo æris*, and apply on the part: alſo red Wax, *ſemper vivum* and a little *Ærugo æris*, mingled together, and apply: and ſo we end this Book, and ſhall follow out to entreat of Wounds.

(***)

THE

The ſixt Booke:

Of VVounds.

Which containeth XIII. Chapters whoſe contents be theſe; by PETER LOVVE. *Scottiſh-man.*

Chap. 1. Of Wounds in generall.
2. Of the ſimple Wound in the fleſh.
3. Of the compoſed Wound, with loſs of ſubſtance.
4. Of the contuſed Wound.
5. Of Wounds done with Gun-ſhot.
6. Of burning with Gun-powder.
7. Of Wounds in the vaines and arteries.
8. Of Wounds in the nerves.
9. Of wounds by byting of venemous beaſts.
10. Of Wounds in the bones.
11. Of Wounds in the head.
12. Of Wounds in the Thorax.
13. Of Wounds in the Belly.

CHAPTER I.

¶ Of the Cauſes, Signes prognoſtick, and Cure of Wounds in Generall.

Interloquuters. Peter, *and* John.

Pet. LIke as we have proceeded in the former Book of Tumors, we ſhall follow out the ſame method in Wounds, firſt demanding of you what is a Wound?

Joh. It is a ſolution of continuitie, recent, Definition.

recent, bloody, without putrefaction, either in the soft, hard, or organicke parts.

Gal. meth. 3 cap. 10. Celsi. li. 5. ca 26. Gal lib. 2. de fractura.

Pet. What is the cause of wounds?

Cause.

Ioh. The Causes are divers, and doe happen divers wayes, by the which the wound taketh divers denominations, as if a wound be made by a thing sharpe pointed, as a Rapier, Launce, or Dart, it is called thrust or stobb: if by a sword or any such thing that do cut, it is called incision or cut: if of a heavie and blunt, as a Stone, Bat Clubbe, and such like, which are done by force and violence, breaking and contunding the flesh, it is called contusion.

Celsus ibidem.

Pet. Which are the Signes of wounds?

Signes.

Ioh. They be manifest, according to the judgments and accidents that follow.

Gal. de causis morb. ca. ult. Celsus ibidem.

Pet. Which are the difference?

Difference.

Ioh. Some are simple, others composed.

Pet. What is a simple wound?

Ioh. It is that wherein is no lacke of substance, and healeth by one way onely, as sayth Hippocrates.

Hippo. li. 6. apho 18.

Pet. What is a composed wound?

Ioh. It is that in the which there is losse of substance, and hath divers intentions for the cure thereof.

Pet. Differ they no other wayes?

Ioh. They differ also in this, that some doe heale easily, others are difficile, some be mortall, some without intemperie, some be little, others great, superficiall, profound in the simple or similar parts, others in the instrumentall or organicke parts, some doe happen in soft, others in hard parts.

Pet. What are those that heale easily?

Hip. 2. aphor.

Ioh. Those which are in the flesh, without incision of vaines, arteries, nerves, and in bodies well disposed.

Pet. Which are dangerous?

Celsi li. 6. ca 26. Hip. 6 sec. ech Paracel. Chir. magna.

Ioh. All those which are interne in the membraines of the braines, in the loynes, in the bordes of the Diaphragma, great intestines, and those that are in the joynts; also wounds in the nerves which cause convulsion, by reason of their

their communication of the braines; those in the *Oesophage*, vaine Jugulares, flancke, thighes, betwixt the fingers, and such as are without humor, all wounds in the head both great and small, with such wounds as are deepe made ouerthwart the muscles. *Hip li. de vulnerib capitis.* *Hippo. lib 5. apho. 46.*

Pet. Which are mortall?

Joh. All those in the substance of the braines, heart, lyuer, middest of the lights, chest of the gall, middest of the Diaphragma, stomake, melt, kidneyes, small intestines, bladder, matrix, trachearterie, and spinal medul; those which are in the rootes of the muncions of the noble parts, also in the vaine descending or ascending, vaine port, great arterie, or in the backe. *Hip. aph. sect. 5. Gal. lib 4. ca 6. Celf. li 5 ca. 26 Rui. li 1 cha. cap 6*

Pet. Which are the peculiar signes, whereby you know those parts to be mortall? *Fallop. exposit. in lib. Hip. de vulnerib. capi. cap 95. & 93.*

Joh. Euery one haue their owne particular signe, as if the braines or membraines thereof be hurt, the blood commeth forth by the nose and eares, with vomiting of choller, auoyding of the excrements vnawares, the face groweth vgly to the sight: the feeling and understanding dull, with conuulsion and raving within three or foure dayes. I know the heart to be hurt, when there commeth forth quantitie of blood, thick and blacke, chiefly the right side being hurt; if the left, the blood is more red and subtil, the pulse becommeth weake and variable, pale colour, with universall trembling, auoyding a cold euill fauoured sweat: the extremities war cold, often sounding, and briefly death. I know the Loynes to be hurt, when the sick doth breathe with difficulty, voyding a spumous blood at the mouth and wound, also when the sick lyeth on the wound, speaketh more freely than on the other side, with raving, red colour, and hote in the visage, sometimes auoyding quantitie of matter by the wound. The membranous part of the *Diaphragma* being hurt, the flanck doth retyre with great weight on the part, dolour in the ridgeback, difficultie to breath, coughing with issue of a spumous blood at ỳ wound.

Celſus lib. 5. cap. 26. If the Liver be hurt, there commeth out abundance of blood at the wound, the ſlanckes retyre towards the backe, the colour like death, the eyes ſink in the head, want of reſt, the urine is bloody, the excrements purulent, the ſick commeth to lye on the belly, the dolour is pricking, extending to the breaſt-bone and ribbes, in reſpyring he draweth in his ſhoulders, and vomiteth choller. *Paulus Ægineta* reporteth, *Paul. 6 ca 28* that one lobe of the liver may be hurt, and yet death not follow of neceſſity. If the milt be hurt, the blood commeth forth black and thick at the wound or left ſlanck, which with the ſtomack wareth hard, there is great drought, dolour in the left ſide, alſo in ỳ region of the liver: if the kidneys be hurt, the dolor deſcendeth to the roote of the thigh & teſticles, with difficultie of urine, piſſing of blood, ſometime the blood ſtayeth within, & the ſick becommeth all ſwollen, and ſo dieth. If the orifice of the ſtomack be hurt, there enſueth vomiting of choller, alſo of the meat and the drink, the pulſe groweth weake, extremities cold, often ſweating. The inteſtine *Jejunum* and ſtomack being hurt, have the ſame ſignes, *Paul. li 6 ca 8.* with the meat and drink comming forth at the wound, the ſlanck dolorous and hard, voyding choller at the mouth, *Celſ. li 5 ca 26* the ſpittle blew, and extremities ware cold. The Spinall medull being hurt, there happeneth convulſion and Paraliſme, the ſeeling groweth remiſſe, the inferiour conduits *Hippo ſect 6 aph. 28* are relaxed, ſo that the urine and excrements voydeth away unawares. The Bladder being hurt, there is great dolour on the ſhare-bone and Ilia, piſſing of blood, voyding of the urine at the wound, vomiting of choller, coldneſſe of extremities. If the Matrix be hurt, the dolour doth communicate to the liskes, haunches, and thighs, the blood commeth forth partly by the wound, and partly by nature: ſome loſe ſence, reaſon, and ſpeech, and have the ſame accident as thoſe *Celſ. li 7 ca 6.* who are hurt in the heart. The Inteſtines being hurt there is great dolour, with continuall voyding of the excrements at the wounds.

Per. What is to be conſidered in the judgements of wounds?

Job Fiſt,

Joh. First, To know what part is hurt and the nature thereof, whether there be any hope of health, knowing the parts that are easie to heal, difficile, and mortall; also the usage, action, substance, scituation, the figure of the wound, actions that happen. The temperature, age, sex, region, season, and constitution of the time, wounds in the nerves, tendons, joynts, and bones, without appearance of tumor or evill signes, and sheweth the humor to have taken the course to the noble parts. Hippocrates saith, if in the wound of the articles, flux of the belly doth happen, it is evill, and for the most part mortall. Wounds with fracture behinde, are in danger of spasm, and such as are before are in danger of raving and frenzie. If convulsion happen in a wound, chiefly after great inflamation, it is for the most part mortall, and sheweth that the parts nervous are hurt. Wounds in the head, if after ten dates symptomes doe happen, it signifieth abcesse in the liver, and great drought signifieth the same. Wounds with great losse of blood, if convulsion ensue, are dangerous; as also all thrusts in the nerves and tendons, and in voluntary vomiting of choller, or if the inflamation lasteth long, are all evill signes. *Judgements of Wounds.* *Lib de articulis.* *Hippo. sect. 5. aphor. 65.* *Celsus ibidem.*

Per. Untill what time should we stay our judgement of wounds in the head?

Joh. To forty dates, some late Writers till fifteen or twenty dates, after which time, often fevers and other evill accidents, which chanceth often in time of full Moon, in which time I did see sundry dye. *Hip li. de vulnerib. capitis.*

Per. What time of the yeer is most expedient for the curation of wounds? *Cure.*

Joh. The Spring time, the weather being neither hot nor cold. the Autume is worse, for the moistnesse of the aire; also the Winter is enemie to all ulcers and wounds, in the membrains and bones. *Hip li. de ulceribus & aphor. sect 5* *Fallop. exposit. in lib. Hip. de vulnerib capit. cap. 25.*

Per. How many points are there to be observed in the curation of wounds?

Joh. Five, in ordering of universall remedies, with good regiment,

regiment of life, and good aire, which muſt be hot and temperate: the ſick muſt be nouriſhed with little meat and of light digeſtion, ſomewhat refrigerative. If there be fear of feuer and inflamation, which is moſt to be feared before the ſeuenth day, for the which abſtain from wine and all ſtrong drink, except through loſſe of much blood the heart be faint, ſup lightly, and abſtain from women, and all violent paſſions of the minde. If great dolour, inflamation, or conuulſion happen, as in parts nerbous and bare of fleſh, let blood, and uſe light purgations, if the body be Cacochimick. In great wounds of the head, and ſuch other times as is not meet to giue potions at the mouth, as you ſhall perceiue by the eſtate of the diſeaſed, uſe Oliſters. The Second point, in taking away that which is noyſome, as Iron, Balls, any Stones, Wood, and ſuch like, Cloth, peeces of bones, or congealed blood.

Celſ. li 5 cap. 26 & 27.

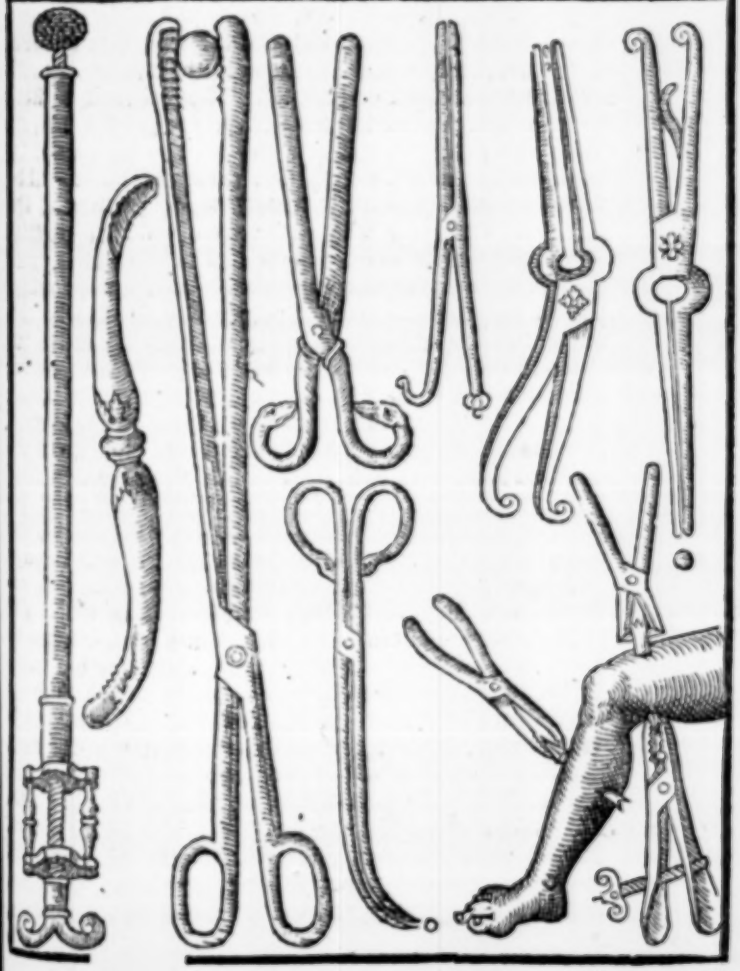
Savona cap 4 li 1. de balneo Gal. l 4 meth cap 6. Filip li curat. cap. 26 & 27. John de Vige & Guyd. Rol li 1 ca. 22. Pa li 6 ca. 38. Oribaſis. lib. 7. cap. 17. Celſ li 7 ca. 5

Pet. By what means take you ſuch things away?

Joh. They ſhall be taken away either by the part where they enter, or parts whether they tend, which is done by diuers ſorts of Inſtruments fit for that purpoſe.

Inſtruments

Instruments to drawe bullets, arrowes, and other strange things, from woundes.



Plin. li. 24 ca. 19

also by the help of those medicaments, *Radix petasitis veneris cum malva tusa, aristolochia, ammoniacum cum melle, radix arundinis contusa melle mista, altercifructus, lacerti caput tritum & appositum*, excepting alwaies, if they be in some noble part, in which case they are not to be touched, because it hasteneth death and helpeth not. Then wee must consider if the thing be superficiall not past, yet the great vains, arteries, and nerves, in that case they shall be drawn out by the wound: but if it passeth those great vessels, it shall be drawn by the part where it tendeth to, by incision of the part, least in drawing of it by the wound, you hurt and dilacerate those vessels, which thing is most to be feared in broad Arrowes. By this form the wound healeth more easily, and the medicaments may be applyed on both sides, as also the matter may avoid more easily: in making of the incision there is great care to be had, not to cut vain, nerve, nor arterie. If at the first those things may not be drawn out, they are to be let alone a certain space: in the which time, the flesh that is about it doth consume and putrifie, so giveth a more easie passage. The late Practicioners are of opinion to pull out all those strange things at the first, because then the patient feeleth not the sore so much as afterward: besides, shortly after the part doth swell through flurion of humors, which maketh the wound narrow, accompanied with great dolour, more than at the first. For the extraction we situate the sick in such form as when he was hurt, and seek the strange thing, either with a sound or finger which is most sure, and draw it forth with the least pain that may be. If the wound be not great enough that it may not be drawn with dilaceration of the flesh, which maketh great inflamation and dolour, in that case we must dilate the wound with a Bystorie or Razour: for the which it is most necessary to know the form, substance, situation and collection of every part, with the symptomes which doe commonly follow: if that thing which you would draw, be in the bone, it must be drawn by a Tyrefons, and

Jacob. Dinus.

To take out strange things of Wounds.

Avicen lib 3. de dolore capitis ex contusi. Fillip. lib. 1c. citato cap. 19.

and ſhaken a certain time afore, as counſelleth *Rollandus lib.* 1. If the bone be much broken, we uſe dilatation of the wound, both to draw thoſe little bones more eaſily and conſume the great: if without great pain the Bullet, Arrow, *Al in 2. cap 59.* or other thing cannot be found, and the ſick feel no great harm thereof, it is beſt to let it alone till ſuch time it ſhe weth it ſelf by the working and moving of nature. The *Pal li 6 ca 88.* third intention, we cloſe the lips of the wound by bandages and ſutures.

Per. What is Suture?

Joh. It is a joining of the parts ſeparated againſt the courſe of nature, which in great wounds is done by needle and thread, to the end the ſiccatrize be more ſure: like as in great wounds of the thighes, legges, and armes, where there is great diſtance betwixt the bordes or brims of the wound. If the part be altogether cut, and have almoſt no *Gal li 3 meth. ca elit & com. in Aphо 9.* hold whereby to receive health, the ſuture availeth not: alſo if the bordes of the wound be inflamed and tumified, no ſuture muſt be uſed till the inflamation be paſt, and the wound ſomewhat ſuppured: in doing whereof, it muſt neither be too ſlack nor too ſtraite.

Per. How many ſorts of Sutures are there?

Joh. Divers, according to the diverſity of the wound, hurt part, or nature of the body, and are commonly referred to three, to wit, Incarnative, Retentive, and Conſervative.

Per. After how many waies doeſt thou uſe the Incarnative?

Joh. Five waies, firſt with a needle of reaſonable length, *Hippo lib. 6. apho. 18.* ſometimes curved, triangular at the point, with a ſoft ſtrong round thread, to the proportion of the wound and needle: alſo the needle caſe muſt be holden on the other ſide of the wound to hold it ready, that the firſt ſtitch be in the outſide of the wound, and hold the caſe on the hurt ſide, make your next ſtitch on the hurt ſide of the border, & the caſe on the whole ſide, beginning alwaies your ſtitches in the middle of

Gal. li. 3 meth. cap. 4. Celsus lib 5 cap. 26. 27.

of the wound, taking reasonable great stitches in deep wounds, and superficiall in small wounds, joining the lips of the wound evenly and closely together, so knit the thread and cut near the knot, then if need be, put another stitch interspace betwixt, observing alwaies that the stitches be no nearer than an inch one to another.

Pet. How the second done?

Cell. 7 cap 16. & li 5 cap 26

Joh. Either with a needle or divers together, as if the wound be great and deep, and the thread not sufficient, we passe an other needle in the wound, as the president, yet not drawing it through, as doe women, when they stick a needle in their sleeves, and turn the thread about it; and after this order, use so many as shall be needfull, according to the greatnesse of the wound: and this kind of Suture we use in cloven lipps, which shall bee done in this manner. If it be not great, and much dilated, and the person neither too yong, nor too old, nor of evill habitude, we take the lipp and cut all the skin of the inner side of the cleft with an instrument, then we passe one needle as abovesaid, or two if need be, with an emplaister of Betonica, or such like, which doth conglutinate the lipp commonly in ten daies, after which time cut the thread, and take out the needle, and induce the cicatrize, as in others: Doe the like in the eares, or nose, being so cloven.

Pet. How doest thou the third Suture Incarnative?

Joh. With long needles and strong thread, double, with an hard knot on the end, which we passe in divers parts of the wound, leaving alwaies an inch betwixt, then passe a little round peece of wood the greatnes of a small Gos-quill, in each side of the wound under the thread, and presse the lipps of it gently together, and knit the thread with double knots one after another, untill all be knit, which is used in great deep wounds, that the stitches doe not break or slipp.

Gal. 3 meth. cap. ult.

Pet. How is the fourth Suture Incarnative done?

Joh. By little peeces of Cloth, as the breadth of the wound

wound and place requireth, that is ſtrong, with the ſelvage cut in points like Arrow heads, the reſt ſhall be covered with ſome aſtringent and conglutinative emplaſter, as this, Take powder of Sangue Dragon, Truboll, Incence, Maſtick, Sarcocolla, fine flower, incorporate all with whites of eggs, and lay on both ſides of the wound with the aforeſaid cloth, and the cloth be further back than the lippes of the wound, ſo the points ſhall be near to the ſaid lipps or borders, which being faſt, wee put a thread through theſe points till ſuch time as wee ſee the lipps of the wound to cloſe, and knit the thread with a double knot, this is called the dry Suture, and is commonly done in the face, and ſuch places, where we deſire the Cicatrize not to be ſeen. *Aviceu. trall. 1 cap. 8.*

Portraiture

Portraiture of a drie Suture.



Per. How doest thou the fift Suture Incarnative?

Fl. With claspes of Iron sharpe poynted, and long, which take lippes of the wound being put together, and hold them so: this was used by some old practicioners, but at this present it is not in use, as be dolozous, and excitety inflamation and flurion.

Per. How

Pet. How is the ſecond kinde of Suture generall done?

1 Suture generall called reſtreintive.

Joh. It is done after the manner that the Glovers ſowe their gloves, but is neither ſure nor profitable, for one point ſlipping, the reſt ſlippe alſo. In like manner, ꝓ blood, which is retained, ſwelleth the part, and falleth amongſt the muſcles, which often doth rotte, and gangren the part: ſo it is better to knit the vaines and arteries, or cauterize them, which I have done with good ſucceſſe, and was uſed by our Ancients where there was great effuſion of blood in the vaines and arteries, and now commonly uſed in the inteſtines, ſtomacke, and bladder, and ſuch other membranous parts.

Pet. How is the third Suture generall done?

3 Suture generall called conſervative.

Joh. As the reſt, but not ſo hard, and is uſed to conſerve the lippes of the wound being ſeparated, and where there is great loſſe and dilaceration of fleſh.

Pet What time appoynt you to take away the poynts of your Sutures?

Joh According to the opinion of Vigo, in 6. or 8. dayes, yet in our ordinary practiſe we limit no time, for ſome conglutinate ſooner than others, ſo when the part divided beginneth to conglutinate, aſſuredly we take out the ſtitches. *Vigo lib* 3.

Pet. Is there no other ſort of Sutures commonly uſed?

Joh. There is a kinde which we uſe in the belly, called *Gaſtroraphie*, of the which divers have written in divers manners, here I will ſet down that which is ſure and moſt eaſie in the wounds of the belly. Firſt, if the guttes come forth, they muſt be put in their place, alſo ꝓ caule, firſt knitting and cutting away that which is altered, leaving the end of the ligatour out at the wound, that which falleth may be drawn out, then thou ſhalt cauſe one to take both ſides of the wound in his hand, then he ſhall diſcover a little of the wound, ſo make the firſt ſtitch of the needle at the extremitie of one ſide of the wound, pearcing the skinne and muſcles, not touching the periton, thereafter put the needle in the other ſide through the periton, muſcles, and skinne, *Gal. 6. meth. cap. 4. Albucr. lib 2. cap 85. Celſ. lib. 5.*

then make another ſtitch like to the firſt, not touching the periton, then make the fourth point like the ſecond, pearſing periton, muſcles and skin, ſo continue it till it be all ſewed, taking the periton on the one ſide, and leaving it alwaies on the other. If the Epiplon be alterd, cut it away, tye the reſt in feare of flux of blood, hold forth the one end of the thred till it fall off it ſelfe.

Pet. What is bandage or ligatour?

Ligator which is the ſecond help in conjoin'ng of wound. *Celſ li 5 ca 26.*

Joh. It is a peece of cloth made long two or three ells, and in breadth three or four inches, according to the member and hurt, the cloth muſt be ſoft, clean without hem or ſeame, and more ſlack in wounds than in fractures, and of it there are divers ſorts, for ſome are to containe, as in ſimple wounds, ſome are to expell matter, as we ſee in cave wounds, ſome are defenſives to ſtay fluxion, ſome to retaine the medicaments on the part, as in the throat and belly, ſome are mortificative which we uſe in legs or armes gangrened, to cut them off. The way how theſe bandages ſhould be uſed, are after divers manners, according as you ſhall heare in their proper places hereafter.

Orib. li. de faſc.

Four points in correcting accidents of wounds.

Pet. Which is the fourth point obſerved in curing of Wounds?

Joh. To give order to the accidents, which are double, to wit, proper and accidentall.

Pet. Which are proper?

Joh. Apoſthume, Hemeragie, and Putrefaction.

Apoſtume.

Pet. What is Apoſthume?

Joh. I have ſet down the definition, figures, difference and cure thereof in the generall Chapter of Apoſthumes.

Hemeragie.

Pet. What is Hemeragie?

Joh. It is an iſſuing of the blood in great abundance, the vaine or artire being cut, riven or corroded: there is another flux of blood, which ſometime commeth at the noſe, and chanceth often in dayes criticke, which ſhould not be ſtayed, unleſſe it be exceſſive.

Gal 3 de viſis

Pet. How ſhould the exceſſive flux be ſtayed?

Joh. By

Iob. By things about and on the place, which cole, aggliuate, and drie, by ligatours, cauters actuall, and such like, as I shall set down in the Chapter of Wounds. with flux of blood.

Pet. What is Putrefaction? Putrefaction.

Iob. It is that which corrupteth and letteth the spirit and naturall heat in the member, where through it becommeth rotten and putrified.

Pet. What is the cause of this putrefaction?

Iob. Either corruption of the spirit vitall, or else viscous and cold humors, which stop the passage of the vitall spirit, some are causes primitives, as strokes, contusion, straight binding, and such like.

Pet. What are the accidentall causes? Symptomes accidentall.

Iob. Evill complexion, fever, dolour, spasme, paralisye, syncope, and alienation.

Pet. What is evill complexion? Evill complexion.

Iob. It is an evill comixion of the foure humors, when one raigneth more than another, as was said in the first booke.

Pet. What is fever? Fever.

Iob. It is an extraordinary heat, beginning in the heart, sent through all the body with the spirit and blood, by the vaines and arteries,

Pet. By what means is it cured? Cure.

Iob. It is distinguished according to the time, cause, and nature, which points belong to the Physition.

Pet. What is Dolour? Dolour.

Iob. It is a feeling of a thing, which hath a contrary qualitie in our bodies.

Pet. What is the cause of Dolour?

Iob. Solution of continuitie, or some sodain alteration; the accidents which come of it, as also the cure, is set down in the generall Chapter of Tumors, yet wee will say somewhat of it at this present. All dolour maketh alteration of humors and blood, which maketh inflamation, for the *Pa li 2 ca 39.*

which foment the place with oile of Roſes, with the white of an egg, if the dolour be great, ſtupifie the part with oile of Poppie and Opium, with Mandrager, alſo the root of Solanum brayed and put with the ſame, is good to mitigate the dolour, as ſaith Galen: if it be not appeaſed by theſe remedies, it is ſigne that the nerves are hurt, for the which have recourſe to the wounds in the nerves.

lib 7 meth & lib 3 cap. 4.

Spaſm.

Pet. What is Spaſm?

Arnald lib 1. breve cap. 25

Joh. It is a malady in the nerves, making involuntary moving, drawing the muſcles and tendons towards their beginning, uneaſie to relaxe.

Pet. What is the cauſe of Spaſm?

Hipp. aph lib. 5 & 6 apho 39. & Gal. lib. de ſymp. cauſ.

Joh. Repletion, evacuation, and dolour.

Pet. Is it dangerous?

Joh. Avicen ſaith, That all ſpaſm confirmed in wounds is mortall, others are curable: that which chanceth through thrusts in the nerves is evill. If it happen by great evacuation of blood, it is mortall, as ſaith Hippocrates, and better it is, that a fever come in a convulſion, than convulſion in fever: Spaſm after fevers, is mortall, as ſaith Hippocrates.

Pet. Which are the ſignes of Spaſm?

Joh. Difficile moving of the body, tention of the neck, contraction of the lippes, attriction of the jawes, perverſion of the eyes and face, which, if it take the courſe to the parts appointed for reſpiration, it is lamentable, and the ſick ſhall ſoon die, that which is confirmed, is incurable.

Pet. What is the cure of it?

Cure.

Joh. First in good dyet, with dry aire, moderate ſleep, open belly, eſchewing the paſſions of the minde, uſing corroboratives, we foment the part with Hydrolion or Hydromell, ſometime bathe with water wherein hath been ſodden Mallowes, Althea, and Violets, extremities of Calves, Mutton, Goats, Lambs, and ſuch like, with a certain quantitie of oile: being taken out of the bath, rub the part with oile of Violets, ſweet Almonds, Hennes greaſe, or Mutton,

Sutton, alſo rubb the neck, back, and head being raſed, with oile of Lillies, Vulpinum, Turpentine, *Philoſophorum*. For the ſame purpoſe, dry perfumes are good; it ſhall be good ſometime to draw blood on the ſame ſide, if there be plenitude with inflamation: if there be cacochymie, purge the body of the humors which abound: if the cauſe come of dolour, or ſome bite of a venomous beaſt, the dolour muſt be appeaſed, and apply on the ſore Treacle and ventoſles, to draw out the venenoſitie. *Gal. 6. meth. cap. 3. Gal com. ap. 17. lib. 5.*

Pet. What is Paraliſie?

Joh. It is a mollification, relaxation, or reſolution of the nerves, with priva tion of the moving, whereof there is two kindes, univerſall and particular.

Pet. What is the Univerſall?

Joh. It is that which occupieth all the body ſaving the head, and if it poſſeſſe the head alſo, it is called Apoplexie, which is another kinde.

Pet. What is the particular? *Gal. 3 de loca affectis. cap. 19.*

Joh. It is that which poſſeſſeth one member only, as the hands, feet, tongue, leggs, and ſuch like.

Pet. Which are Cauſes?

Joh. Some are intern, and ſome extern. Intern, as groſſe humors, which moiſten the nerves in the brains and marrow, which let the vitall ſpirit to paſſe. Extern, are wounds, inciſion, falls, ſtrokes, contuſion, apoſthume, cold bandage, all outward things that may let the animall ſpirit to paſſe.

Pet. Is it curable? *Arnald brevi. lib. 1. cap. 24.*

Joh. All Paraliſies are difficile, by reaſon the nerves are deſtitute of their natural heat, which is the efficient cauſe of curation, yet ſome are curable; when the nerve hath loſt the feeling and moving, it is called Apoplexie; when it cometh to one ſide, it is called Reſolution of the part. Cure. *Gal 3 de locis affectis.*

Pet. How is it cured?

Joh. By univerſall and particular remedies: univerſall, as purgations, Cliſters, blooding, good diet, hot and dry;

particular, as emplaisters, linements, ventosies, cataplasms, fomentations, also the balm of Guydo, who counselleth to apply ventosies in the beginning of the nerves. Togatius counselleth, a liquor set down *in additionibus Petri apponensis descriptionis prima* also to rubb the neck, back, and parts most offended, with *unguentum martiatum* or *Agrippæ*: Or this, which was shewed to me by my well experienced friend Master William Clowes, Chyrurgion Ordinary to Queen Elizabeth of worthy memory, and is thus. *Rec. Artemisiæ, Rosarum damasc. an. M. 4 florum lavendulæ, primulæ veris, basilicorum, manibæ majoranæ, an. M. 2 foliorum lauri, abrotani, origani, camomillæ, an. M. 1 absinthii, Rosmarini, pulegii, an. M. ſem. bulleant simul omnia in ſuff. quanti aquæ, deinde adde, aquæ compoſitæ vel malvaſe, lib. ſem. fiat focus*, after the part be well dryed, they shall use this linguent, *Rec. Olei primulæ veris, unc. 2 medullæ tibiarum equi in aquâ vitæ cocti, unc. 3 olei caſtorii, unc. 1 olei hypericum unc. 1 ſem. muſci in oleo camomillæ diſſoluti gra. 20. miſceantur, & fiat linimentum.*

Syncope. *Pauli. 1 ca 37. & 38. Gal. 2 meth. c. 5.*

Pet. What is Syncope?

Joh. It is a suddain fall and decay of all the whole facto of the body, and of all accidents it is the worst.

Pet. Which are the causes of it?

Joh. Great evacuation of blood, intemperature of the noble parts, vehement passion of the spirit, fear, lack of courage, rotten vapours, as happen in pestilent fevers, and all things that may intercept and destroy the vitall spirit.

Cure. *Gal. 10 ingenii ſanit ca. 5. Gal. 12 meth. cap. 4.*

Pet. What is the Cure?

Joh. First, To encourage the sick, speak little, give him a little wine, cast water in his face, and hold vinegar at his nose: draw his extremities, and chiefly the finger, and rub the part affected with this, *Rec. Olei coſtini, terebinthinæ, an. unc. 2 miſceantur & ungatur.* With this unguent, *Rec. unguenti martiati, unguenti Agrippæ, an. unc. 1 ſem. olei coſtini, & nardini, & de pipere, an. drag. 1 ſagapeni, opopanacis diſſolutorum in vino, an. drag. 2 ceræ parum, fiat unguentum,*

num, quo ungatur utrorumque origo?

Pet. What is Alination?

Joh. It is an inordinate perturbation of the minde, with diverſitie of ſpeech, whereof there are two kinds, proper, and accidentall: the proper, is that which we call madneſſe: the accidentall, is that which we call raving, as chanceth in hot fevers, and other maladies, wherein hote fewmes aſcend to the head, or by hote and cold ayre, as ſaith Avicen, alſo by putrefaction and denſitie of our meat and drink, and is cured by diverting the fumes with frictions and ligatures of the extremities, uſing glyſters, and rubbing the head and neck with Dyacodinum, and divers other things which may be preſcribed by the learned Phyſition. *Gal. 9 meth. cap. 10*

Pet. What is the fit thing to be obſerved in curing of Wounds? *Gal. 3 ther. Put.*

Joh. To conſerve the ſubſtance and the temperature of the hurt part, and conſolide the wound, which is done with ungents, emplaſters, tents, plumations, as ye ſhall heare in particular. Things obſerved in curing wounds.

Pet. Tell me ſome thing of Plumation, Tents, and their uſe?

Joh. Plumations are made of little peeces of cloth, the threds drawn out, or the peeces of cloth themſelves, wooll, towe, the pith of Elder tree, the hairs of a hare, Gentian. Of theſe, ſome are round, ſome are triangulars and quadrangulars, the Ancients give them divers denominations, either of the matter they were compoſed of, or of their forme: ſome are applyed dry, others wet in divers liquors, as whites of Eggs, wine, vinegar, or oyle, according to the diſpoſition of the part we apply them unto. Sometime we apply many, otherwhiles few, as the caſe requireth. The Tents are ſometime made of cloth, otherwhiles of ſponges or roots of certaine Plants, Braſſe, Lead, Silver: ſome are within, others not; of length and greatneſſe according to the hurt: ſome are even, others crooked, yet alwayes round, and are uſed for divers cauſes, as when wounds are *Gal. com aph. 31 & li. 1. de offic. medici.* *Hille li 3 ca 4. De materia chirurgica.*

to be amplified or cleanſed, alſo in cave wounds with loſſe of ſubſtance, in contuſed wounds, altered by the ayre alſo when the wound is afflicted with phlegmon or any other tu-
Gal. lib. 5. mor againſt nature, alſo in wounds which come of byting, for ſuch wounds have ſome venenoſitie. In wounds with corruption of bone. In all other wounds we uſe not theſe things, but induce the ſiccatrize and conſolidate the wound.

Conſolidation. *Pet.* What is Conſolidation?

Joh. It is that which hath power to ſoyne, conſolide, and dry the wound, and maketh it like unto the skinne.

Pet. What is Skinne?

Joh. It is nothing elſe, but the fleſh made dry and hard by the works of nature, and vertue of medicaments, and is like the other skinne, but not of the ſame nature in all points.

Pet. There are many other things, which may be ſpoken generally of wounds, which (for want of time) wee will referre till our next meeting: againſt which time I will bring with me in writting, my opinion of wounds in particular, as well made by Gun-ſhot, as otherwiſe? and then we will entreate of Vlcers after the ſame manner.

Vulnera cur metuis? miles cur martis & ignis?
Omnia in his chartis tuta medela patet.

Chapter II.

¶ Of the curation of Wounds, and firſt of the Wound in the fleſh without loſſe of ſubſtance.

I Have ſpoken in the precedent Chapter, that wounds in the organicke parts receive no curation; now according to your deſire I will proſecute theſe which happen in ſimilar or ſimple parts, begining with the ſimple wounds in the fleſh, which is without loſſe of ſubſtance, either with accidents or without. As for the cauſes, ſignes, and Iudgements, you have heard ſufficiently in the precedent Chapter:

ter: but for the Cure, the ſimple wound in the fleſh, healeth by joining the lippes of it together and helpe of nature: yet for the more aſſurance we uſe to let it bleed a little, if it hath not bled ſufficiently already: next we dreſſe it with a cleane cloth or ſoft ſponge, then we cloſe, and put on it the white of an Egge with lynt, bind the wound, and ſtirre it not in two or three dayes; the white of the egge preſerveth it from inflammation, heate, dolour, and bleeding. If the wound be great that it joyneth not by the ſimple ligator, we uſe a ſuture, with powders incarnative or retentives, compoſed of *Sanguis draconis*. Thus, Paſtick Polarminie, wheat flower, all mingled with whites of Egge, and a little oyle of Roſes, with lynt on it as before. Also a double cloth broader than the wound, wet with oyle of Roſes and Vinegar, binde it, and ſtirre it not for two or three dayes, if accidents doe not chance, and being removed, waſh it with warme Claret wine, wetting plumations in the ſame wine, which have the vertue to dry and comfort. If the wound be deepe and theſe remedies not ſufficient, we make a liquor of oyle of Hypericon and Turpentine, with the yolke of an Egge, or a little of my balme ſet down in the Chapter of Gunſhot, I uſe, eſpecially following the warres, this digeſtive made of yolkes of Egges hard rolled, and beaten with a little oyle of Hypericon, Turpentine, and Myrrhe, ſo this keepes a longe time, and bringeth the wound to matter, the which not avoyding for the ſcituation, which is too high, we ſcituate the part in ſuch ſort, that the orifice is loweſt, as for example, if the wound be in the thigh, and there be a cavity in the knee, we ſcituate the knee in ſuch ſort, that is much higher then the thigh, if it avoyde not that time, and the cavitie be great, we make inciſion in the bottome of the cavitie, or cut it all together. Thou muſt know which of thoſe iſſues is beſt by the greatneſſe of the wound and nature of the part, it ſhall be beſt to make it in the bottome of the cavity, uſing a hollow tent in it to avoyde the matter. We uſe alſo a ſeton, which is a little roll of peece of cloth, rolled

Cure.
Ga 3. & 4 meth. cap 10. Hip. lib de ult. & Celſus lib 5. cap 26.
Gal 3. Thera. cap 4 & 3. meth cap. 10.
Gal. 4. meth. cap. 4 Gorde part. 1.
Heller de materia Chirurgica.
Gal li. 3 meth.
Celſ lib cap 26
Brunus, Guydo

in

Gal 3. meth. in forme of a cord, annointed with some liquor mundificative, drawing it sometime from one issue to another, and so continuing till it be cleansed, dressing it twice a day, thereafter I use some glutinative medecine, as you shall heare in the next Chapter.

Chapter III.

¶ Of the composed Wounds with losse of Substance.

Definition. THE composed Wound is when there is losse of substance, to wit, skinn, flesh, and bones for the Cure
Cure. we use two intentions, that is, reparation of the substance
Gal li 4 meth. & artis parvi. cap 92 lost, and induction of the sicca trize: that which is lost, if the
Gal li. 2. cap. 2. de cōpos. phar. body be well disposed, it is repaired by nature only, using in the meane time medicaments that are cleansing and drying. If the flesh renne not in his fashion, we use medicaments sarcoticks, which shall be made of *Iris* of *Florence*, *Thus*, *Mastick*, *Aloe*, *Colophonie*, *Pix resina*, *Farinis*, *Hordei*, *Orobi*, *Fenugreci*, *Lupinorum*, *Opopanax*, *Myrrha*, *Sarcocolla*, and *sanguinis draconis*: with *unguentum aureum mesue*. If the wound be deepe, mix some of these powders with Wine, and wash the wound with Turpentine in forme of unguent, and put it in the wound either with plumations or tents, dresse it twice a day in Sommer, once in Winter, using an emplaister that dryeth and comforteth with bandages. In these wounds there are foure intentions to be observed; first, to ingender such substance as is lost, secondly, to know the temperature of the body and hurt part, to the effect, we may judge, whether the medicaments
¶ *Gal meth ca 3.* should be cold hot or dry; thirdly, to know the accidents which happen to the sore; fourthly, the region, ayre, and way of life. The wound being filled up, we induce the sicca trize with epulotick medicaments, as red Desiccative, Album Rasis, Ceruse, Plantine, also to wash the wound with

with wine wherein hath been ſod Balauſt & Alom, or this emplaſter. *Rec. Tuthia preparata, plumbi crudi, antimonii crudi corticis mali granati, balauſtorum, nucum gallarum, boli armeniaci ſanguinis draconis, an. drag. 1. accipiantur omnia ſimul cum unguento ephopheliges. unc. 3. fiat magdaleon bene conſiſtentiæ.* you ſhall find divers other remedies ſet down by *Heller.* Take heed that the ſiccatrize be neither high, low, hard, ſoft, nor inequall: the high happeneth when it is not dryed enough, it muſt be mended by ſcarrifications, medicaments tetericks and corroſives; the low, contrariwiſe, cometh through lack of ſome peece of bone, or too much drying, and is helped only by frictions, the inequality commeth through the points of the needles, which hath been over-thick and ill done, and is helped by medicaments, emollients, diſcutients and aſtringents.

Gal. 3. meth. cap. 5.

Lib. 2 de mate. chirurgic. ca 4.

Hippo. com in aph. 45. lib 6.

CHAPTER IV.

Of the contuſed Wound.

Definition.

The contuſed Wound, to the which chanceth great accidents, according to the Inſtrument it is done with, is a kind of ſolution of continuitie, made with a bruiſe, and is called by *Galen* and ſom late writers *Echymoſis*, in Greek *Thuſma* and *Nygma*, in Latine *Avicis* and *Contuſio*; in the which there is ſeparation and dilaceration of the fleſh and muſcles thereof, with great quantity of blood, and diſſereth ſomwhat from attrition, as ſaith *Avicen.* for contuſion happeneth in the fleſhy parts, and attrition is done in the heads and ends of the muſcles. The Signes are like unto other wounds, with inequalitie and roughneſs in the fleſh and skinne, diverſitie of figure, according to the diverſitie of the cauſe, the part and parts about are black and livid, by reaſon of the blood which is out of his place and remaineth in theſe parts and cannot be evacuated by ſenſible or inſenſible tranſpiration, but by ſuppuration. The Judge-

4 Theurapeuticorum & com. in aph 20 li. 6.

Gal l. 4. meth cap. uli. Signes.

Judgement.

ments

ments, ſhall be according to the greatneſſe of the hurt, for great contuſions are dangerous, for the corruption of the member, and conſequently the body alſo. As for the Cure there are foure intentions: firſt, to ſtay the flux, if the contuſion be with wound, as oft happeneth: but if without wound chiefly in the head, I uſe only oyle of Mar, or new Ware it ſelfe applyed in form of a playſter: next to ſtay the fluxion of humors on the part by evacuation, as purgations, bleeding, ventoſing, ligatoura, frictions, good regiment in unnaturall things: thirdly, in uſing particular remedies; firſt digeſtives, for ſuch wounds muſt ſuddainly be brought to ſuppuration, for the which, uſe this cataplaſm of Mallowes, Violets, Althea ſodden in freſh broth, puting to it a little Barley-flower. Butter, Baſilicon, and the yolkes of Egs, with a digeſtive: Or this, take Mare, Turpentine, Calves greaſe, Owſe-greaſe, Hony, Myrrh, oyle of Roſes, mingle all together. To appeaſe the dolour, uſe oyle of Camomill, Roſes, Lillies, Myrtles, Dryſodin, and Bolarmenie. The fourth intention is, in correcting of the accidents, as dolour, Apoſthume, Gangren, for which uſe ſuch remedies as you have heard in the ſecond Booke. The wound ſuppured, and the accidents corriged, it muſt be cleanſed with hony of Roſes and Turpentine, Mundificative *de appio Apoſtolorum*, and ſuch like, as you ſhall heare in the laſt Booke. Being cleanſed, we uſe incarnatives and diſſeccatives, as was ſet downe in the former Chapter.

Cure.

Hip li de ulce. & vulne capi. Celſ li 5 ca 19.

Celſus, Paulus.

Gal de compoſ medicament. & Actius lib. 5.

Chapter V.

¶ Of Wounds done by Gun-ſhot.

Anton Ferrus de arclib. vul.

I Have ſpoken of ſimple, compound, and contuſed wounds; now will I entreat of wounds with dilaceration and loſs of ſoft and hard parts, and is made by divers ſorts of Inſtruments, as bullets of Lead, Iron, Steel, Braſſe, Stones, and

and other such like matter in divers figures, as round, triangular, quadrangular, pointed, flat, little, and great, which sometime penetrate, sometime not, whereof our Antients have made no mention, except only Celsus lib. 7. cap. 5. who telleth not with what Instrument they were shot with: therefore though some have written of late, yet because they are of divers opinions, and written in sundry languages, I will shew my opinion touching the same, not making any mention of others who have written of the same. These kind of wounds are accompanied with tumor, dilaceration of flesh, vaines, arteries, nerves, tendons, ligaments, and bones superficiall, profound, otherwhiles through the body, and according to the difference, the Chyrurgion must take his indication to diversifie the remedie: in like manner, Apostume, dolour, corruption of the parts congrelled, and mortified through the great abondance of blood, dispersed betwixt the muscles: also for the dissipation of the naturall heate, sometime one only accident, otherwhiles divers together, for the which we use two curative intentions, to wit, restitution of such things as are lost, and to conjoyne the parts divided. These wounds come indifferently to all parts of our body, whereof there are divers opinions, some think that there is venenositie in the powder, and burning in the bullet, which is false, for the things whereof the powder is ordinarily made, as Brimstone, Saltperter, coals of divers sorts of trees, Water, Wine, and aqua vite, have no venenositie in them: likewise, there is no burning in the bullet, for if the bullet of lead being shot a great way, should burn, through heat would be melted it self. I have cured divers within these thirtie yeers of divers Nations, which have followed the Warrs in France, and other Countries, in the which I have found no more difficultie than in other contused wounds: so I think these accidents come only by contusion and dilaceration of the flesh, and not by any venenositie, or ustion: yet there may be some extraordinary mixtion

Sabbat. magi. de vuln. sclopetorum curat.

No burning in the Bullet.

in

in the powder, which cauſeth venome, for the which we take ſome other indication, according to the thing. The Cauſes, Signes, Differences, and Judgements, are not much different from thoſe of other wounds ſet down, and ſufficiently diſcourſed in the generall Chapter; as for the Cure there are five intentions; Firſt, to draw the bull; ſecondly, to appeaſe the dolour; thirdly, to cauſe ſuppuration; fourthly, in mundifying generation of fleſh and conſolidation; fifthly, in correction of the accidents. As touching the firſt and ſecond, to draw out the bullet and appeaſe the dolour, I have diſcourſed at length in the generall Chapter, nevertheleſſe, becauſe in theſe wounds there is vehement dolour, which weakneth the ſick, hindereth nature, cauſeth ulurion, letteth ſuppuration, and conſumeth the fleſh which is contuſed; I will ſet down things more particularly for the appeaſing thereof, in changing the temperature of the whole body, in due uſage of the ſix unnaturall things, by purgations, bleeding, and abſtaining from things which cauſe dolour, as great tents, ſections, ſtraight bandages, wrong ſituation of the part, inciſion, unleſſe there be great neede. The topicall remedies, as cataplaſmes with bread, milke, yolkes of eggs, and a little Saffron, alſo Mallowes ſodden and beaten with wheat flower, oyle of Roſes, Hogs greaſe, and Saffron, are good: Or this, *Rec. Sanguis draconis, boli armeniei an. unc. 1. pulveris roſarum & myrtilorum an. unc. di. aceti unc. 1. albumina ovorum quatuor, olei roſacei quantum ſufficit, fiat unguentum.* If there be great heat, oyle of Roſes, with whites of Egges and Vinegar, layd about, and on the part, is good. Alſo *cerat Galen*, or *unguent. roſat. meſues*, with *bolarmenie, Sanguis draconis*, powder of Roſes and Myrtles. If we feare inflamation, which oft chanceth till the ſeaventh day, uſe the ſame remedies and ſhift them twice or thrice a day. The tents ſhall be ſoft, wet in Turpentine, with a little oyle of Hypericon and aqua vitæ, according to the nature of the part, and uſe this remedie hot, and continue it till the inflamation be paſt, let the ſick eat

and

Cure.
Intentions to draw balls.

Gal therapeu Intentions to appeaſe dolor.

and drink little, that he ingender no ſuperfluities. Avicen counſelleth to give meat to the ſick only for ſuſtentation of nature, abſtaining from wine, for it is enemie to all wounds, drink ſodden water with Sugar, or Honey, or piſane, till the inflamation be paſt, kæp reſt and quiſtnesſe, abſtaining from all actions of the ſpirit, watching, and women, according to the diſpoſition and nature of the hurt. *Hippo lib. 5. apho 17.*

The third intention conſiſteth in medicaments ſuppuratives, which muſt bee done with ſpæd, to the end, they be leſſe ſubject to inflamation, uſing remedies which are of quality hot and dry, with vertue to correct the putrefaction, and let the Gangren and mortification of the part: there are of divers formes; the ſimples are made of oile of Hypericon, yolk of Egges, Lynt-ſæd, Lillies, Turpentine, Hyrhe, and ſuch like: Or this, *Rec. Terebinthine unc. 2 cerucis thuris dra. 1 maſtichis drag. 3. olei hypericonis, & roſarum an. parum, vitellum unius ovi fiat medicamentum.* Or this, which I moſt commonly uſe of Hypericon, Turpentine and yolks of Egges, or my balm which is excellent in all kinds of wounds, made thus, *Rec. ſummitatum & florum ſcrophulariæ & hypericonis an. quantum velveris, ophyogloſſi, vel herbæ carpentariorum & conſolidæ regis an. quantum veveris, terebinthinæ veneta quantum ſufficit, macerentur in ſufficienti quantitate olei hypericonis, inſoluntur omnia in ſole calidiſſimo ſpatio 40. dierum in vaſe plumbeo, vel vitreo duplicato poſtea fiat fortis expreſſio, ſervetur liquor pro balſamo.* 3 Intention. *Hippo li. de ulc. ſect 7.*

The fourth intention is to mundifie and regenerat that which is loſt, which muſt be don with things that have little or no mordication or ſharpneſs, according to the nature of the part, as this, take ſirupe of Roſes, Violets, Fumetarie, Wormewood, Honie of Roſes, *unguent. de apio, apoſtolorum fuſcum Ægyptiacum:* Or this, take Turpentine, hony of Roſes, Iris of Florence, Early flower, *Succi apii*, of each a little, and make an unguent. If there be great putrefaction, and the matter in great abundance, uſe this. *Rec. Terebinthine unc 4. vitellorum ovorum unc. 2. unguenti Ægyptiaci drag. 1.* 4 Intention.

drag. 1 *ſiat mixtio.* The wound being mundified & void of all ſuperfluity, we uſe for the regeneration of fleſh, *unguentum aureum, baſilicon majus, emplaſtrum de betonica, diapalma, tetra pharmacum, gratia dei, oleum maſtichini & abſinthii,* mixe therewith a little flowre of Barley, Lupines, and Roſe, with Thus, Myrre, Maſtick and Aloes. Sometime we uſe in theſe ſorts of wounds, a certaine drinke called *potion vulnerar.* wherewith we waſh the wound, and is thus made, *Rec. conſolidæ majoris & mediæ, ſerpentaria, linguæ canis coronæ, herbæ Robertigloycirize, pimpinellæ, artemiſiæ, ſcabioſæ, plantaginis, ariſtilochiæ, agrimoniæ, betonicæ, pedis columbini, capilli veneris, centauriæ majoris & minoris, galaci, ſalci parvæ, mille folii, baccharum lauri, cupatorii, abſinthii, rom. petroſelini, mille folii, armoglossæ, caudæ equinæ,* tops of Colwort, reddiſh, ſuccorie, horſe hoſe, of which, all or ſome make a decoction in water and armotrize it with Cinamond. Honey or Sugar, drink of it twiſe or thriſe a day as it is needfull, and alſo thou muſt waſh the wound, putting thereto a little honey of Roſes or ſirrup of Roſes. The wound being filled with fleſh, it muſt be dried with medicaments epuloticks which by their aſtriction and drying do harden the fleſh, and make a ſubſtance like to skinne, as *unguentum deſiccativum rubeum diaſpompholigos, album roſis, diacalcitios, atriapharmacum, ceruſſe de minio,* mixing therewith *galbanum acacia, ſarcocolla, plumbum & æs uſtum, alumen, calx lota,* and ſuch like. The firſt intention is in correcting the accidents, which are divers and great, for ſome come by accidents, or ſome are ſharpe feeling of the part hurt, as dolour, inflamation, convulſion, feber, & ſuch like, ſome come through violence of the bullet, as extinction of the naturall heate of the part, hemoragie, dilaceration, contuſion of the nerves, fractures of the bones, and ſome by the ignorance of the Chyrurgion, for the which cauſe he muſt be diligent, to ſtop ſuch accidents, and if they happen, to helpe them with ſpeed.

Barthol. magi de ſchloptarii vulner. curat.

5 Intention.

CHAP-

CHAPTER VI.

¶ Of burning with Gun-powder.

IT happeneth oftentimes in Armes that men are nær ſhot, and ſometimes in handling of powder, or by ſtring of ſtaſkes which often chanceth, by the which enſueth great accidents; in ſo much that the affected part by the violence of the fire is altogether deſtitute of the proper humiditie, and dryeth up in ſuch ſort, that it maketh an eſcharre in the skin and fleſh, chiefly if the ſhot or powder be nær unto the part. As for the Cure of the which, the Chyrurgion ſhould with all poſſible diligence remove the intemperature which chiefly conſiſteth in the ſoftning of the eſcharre, and may be done two waies; the one, by topicall remedies and digeſtives, which doth not too much heat, nor hath the vertue to inflame. The other is done with ſuch medicaments as have the vertue to pacifie the pain and preſerve from putrefaction; ſuch medicaments muſt be applied about the wound, and on the eſcharre with Cotton, Lynt, or peeces of cloth trampled in thoſe medicaments made of two yolks of egs, beaten with oile of Roſes, ſome Barley-flower, and a little Bolarmenie. It ſhall be neceſſary to put a double linnen cloth about the wound, ſoakt in oile of Roſes and yolks of eggs beaten together, take not away the eſcharre with violence, but let it fall off it ſelf, which done and the pain pacified, you ſhall mundifie, cleanſe, incarnate, and ſiccatrize the wound, as in others you have heard: for this purpoſe I have often uſed this Unguent, which doth heal without any mark, as thus. *Rec. Albumen. ovorum numero duo, tuis alexandrini, calcem vivæ novies lotæ unc. 2 ceræ recentis, unc. 1 miſceantur cum oleo roſaceo, quantum ſufficit, fiat unguentum:* Or this, which I did learn of an old Pariſian Prieſt, who vaunteth himſelf to be very expert in healing any kinde of burning by this liquor. Take five or eight Neats-feet bruiſe

Cure.
Pa. li. 4. ca. 17. Rol. li 4 ca 13. 11.

Alphonſus Ferrus.

Guydo de vul ſlagella.

them well, and boile them in water till they be all consumed, then take the grease of them and put in a glasse in the Sunne, or before the fire in Winter, powre out the water if any be, cover it close and keep it, of the which you shall put upon a linnen cloth, and apply to the sore. Remove not the cloth untill it be whole, but only annoint it ever being dry with a Goose-quill, so it shall be whole in short space without mark: Some doe use for this purpose oile of Linget or small water, also sharps dung fried with hogs grease till it be dissolved, adding thereto a little Verjuice, passe it through a cloth and annoint the burnt part.

Chapter VII.

Of Wounds in the Vaines and Arteries.

Having spoken of the wounds in the flesh, in like manner you shall hear of them in the vains and arteries, either with losse of substance, or without losse, which are accompanied with great flux of blood, which happeneth when the orifice of the vain is opened, and is done by incision and imbecillitie of the vains, abundance of blood, or some sharp qualitie, and when their tunicks are divided, contused, and pearced, or else when the blood goeth through the veins, as the sunne through the skinn, the tunicks and membraines are divided by some externall cause, as contusion, ryding, shooting, falls in divers manners. The Signes are these, if the flux be of the arterie, or vein; of the arterie, the blood cometh leaping out subtilly red and hot. If it be more grosse, black, and thick, and not leaping, it proceedeth of the vaines, as saith Avicen. The Judgements are, If the blood come out in great abundance, it is dangerous, chiefly when there is either convulsion, skinn, sounding, belching, or raving; if it be not staied it causeth death, because it is the treasure of life. As for the Cure, There are two intentions, the first to stay the blood, the second to conglutinate the wound:

Brn li. 2 ca. 12.

Gal. 5 metho. cap. 2. & 12. Metho. cap 7. Signes. Gal. 5. meth. cap 7.

Judgements. Hip. aphorif 3. lib 5 & lib 7. apho 9.

Cure. Gui. traft. 3. cap.

wound: the blood is stayed by filling up the wound with dry lint, and above it an astringent or cloth wet in vinegar; if that stay it not, remove the lynt often and wet it in Vinegar, which staunch eth it much: For these things cold and moyscant, stay flux of blood in the wounds: or make this medicament of *Bol armenick, sanguis draconis, thuris, aloes*, of each like quantitie, mix them with the white of an egg and the haires of an old Hare cut small, thereafter bind it reasonable straite, wetting the bands, clothes, and all about it in Oxycrate, touch it not in foure dayes, in touching remove all very softly, if it stick to, humect it with oyle, whites of Eggs, or Wine. Some to stay blood, put this powder in the wound, which I have sometime used, viz. Mans blood dryed with burat cloth, wherewith thou shalt fill the wound full; some apply ventosles, frictions, ligatures, on the parts opposite, some hold their thumbe long on the mouth of the vaine, which is a good remedie, for the blood congealeth in the vaine, and so staunch eth. If for all these remedies it staunch eth it not, we apply on the vaine or arteria a little lint wet in Vinegar with a little powder of Vitreoll, otherwise we knit them as was taught in the Chapter of Aneurisme: if that cannot be done, we cauterize them with hot Irons, taking heed to touch the parts nervous. Shelander counseleth the gumme *Lemnium* sodden in Rennish wine, which hath many vertues, for it digesteth, mundifieth, incarnateth, and is good in wounds of the head, as saith Matheolus. If none of these stanch flux of blood, especially in the vaines jugulars, I have sometimes applyed a little astringent the breadth of the wound, and holden my finger a day or two upon it, by which meanes I have cured divers: if it be in the matrix, intestines, or bladder, it shall be stayed by injections of juice of Plantins, or some astringent powders infused in astringent decoctions, and such like, the blood being stayed, the wound is healed as others, having regard to the part, for as the vaine is more dry then the flesh, and more soft, then the arteria, so it must have contrary remedies: in like

Gal. lib. 5. meth. cap. 2.

Hippo aphor. 20 lib. 5.
Gal. 5. meth. cap. 4
Avic. trall. 2. cap. 18.

Gal principio locorum affectorum cap. 7.

Shelandr. Albucrasis.

Matheolus.

manner the wound in the arterie is harder to be healed, than that in the vaine. Sometime there commeth such flux of blood at the nose, that it is hard to staunch, for the which take an ounce of Boll, the Barke of Pomgranet tree, Balust, and galls, of each three drammes, seed of white Poppis two drames, incorporate all together with the white of an Egge and Vinegar, and apply on the temples and nose; if by this the violent flux doe not stay, take foure graines of my *Requies.* which infallibly stayeth all fluxes; otherwise follow forth such things as are set downe in the Chapter of flux of blood at the nose.

My Requies.

Chapter VIII.

¶ Of Wounds in the Nerves, Tendons, and Ligaments.

Largh. actus. thira parva.

Cause.

Signes.

Gal. meth. 4 cap. 6. & 6 lib. 2.

Cuttes and thrusts in the nerves chance in divers parts of our bodies, and in divers manners, according to the instrument it is done with, some are simple, others compound, superficiall, profound, according to the diversitie, of the which we must diversifie the remedie. The Causes ye have heard in the generall Chapter. The Signes are known by offending of the moving and feeling, and by the vehement dolour, which causeth flurion, fever, spasme, raving, inflamation, and flurion on the nerves.

Judgements.

Bruns Lib 1. Chirur. cap 5

Gal. 6. therm

The Judgements are, that all wounds in the parts nervous are dangerous, for the great communication they have with the braines, and the nerve halfe cut, is more dangerous and dolorous than if it were al cut, which if so be the action of the member doth decay, or at the least some part thereof: also wounds in the joynts are for the most part mortall, because of the Aponeurisis of the Tendons and membranes that they are covered and knit with, for evill accidents doe happen, chiefly being profound. As for the Cure, if the body be full of humors, purge and let blood, with quiet lying and strict diet,

if the

if the nerve be thrust, beware of putting to it any medicines conglutinatives, but first of all some gentle remedies to appease the dolour, hold the wound open: if it be narrow and deep, incise it that the matter may passe more easily, then put in the wound a medicament that heateth and dryeth, to wit, oile of Hypericon, Turpentine of Venice, Aquavite, and a little Euphorbe, some put to the Turpentine and oyle of Hypericon, a little quick-sulphure, rub thereabout with oyle of Sage, Turpentine and Annisseds, which must be reiterated twice or thrice every day. If there be putrefaction or inflamation, use a cataplasm made of Barly-meal, Lynt-seed, Dreb sodden in Sapa, Vinegar, or Drymell: sometimes cometh picking of the nerve in the armes by bleeding, for the which use this set down by *Mesues*. Take two ounces of oyle of Olive, of salt two ounces, sethe them together and put to it oyle of Turpentine, and put it hote in the wound: if dolour happen, it shal be appeased as ye have heard in the generall Chapter: if convulsion, rub the head, neck, back, and under the armes, with oyle of Lylies, Bayes, *costini & umbricorum*, Hennes grease, Calves marrows, unguent *de althea*: if the nerve be cut in length and appeareth to the sight, abstain from all sharp remedies, as Euphorbe, use *Diapamphotigos* dissolved in oyle of Roses. Also this remedy of hony dissolved in oyle of Roses, Ware, a little Turpentine, all which remedies must be applyed warme. If there be much matter in the wound, dresse it softly with bumbast, or washed with sweet wine, and lay on it the emplaster *Triapharmacon* or *Eneapharmacon*. If the nerve be cut overthwart, there is great danger of convulsion and inflammation, for the fibres which are cut communicat with the uncut. For the Cure of the which, rest, keep dyet, and draw blood, with such other remedies as ye have heard. If the nerve be contused, and the skin also, and ulcered, it requireth a medicament drying, and binding the parts disjoyned, made of Drymell, flower of Beanes and Dreb sodden together, puting thereto a little

Rol li 3 cap 5.

Pa. li 4 ca. 54. Gal. meth 6. Gal. cap. 6 de com tied c Actius lib 4. cap. 17.

Gal. 6 meth. cap 2. & 3. Mesues de aegritud. lib 6. cap. 3.

Gal. 6 meth. cap 2. Hippo. lib. 5. apho. 13.

Gal. 6. meth. cap 3.

flower of Ervy, alſo to rubbe the part with oyle of Roſes, and the white of an eggs, thereafter foment the wound with warme wine. If the nerve be contuſed without offence of the skinne, rubbe it with oyle of Camomill, Iris, and Rus. If the tendons be hurt, which is a ſubſtance mixed with nerves and ligaments, they have the ſame cure that nerves have, but the medicament muſt be more ſtrong and dry. If the ligaments be hurt, which are like the nerves & tendons, it requireth a ſtronger medicament, for they have little ſæling, not communicating with the vains, they proceed from the bone, and goe to the bone, ſo any medicament drying may be uſed without offence: thereafter fill up the fleſh, and conſolide the wound, as others.

Gal. 6. meth. cap. 4
Gal. de comp. Phar. lib. 3. cap. 4 & 9.

Chapter IX.

¶ Of Wounds which happen by byting of venomous Beaſts.

Celſ. li. 5 ca. 27.
Paul li 5. ca 2.

SEeing we have ſpoken ſufficiently of moſt parte of wounds done by inſtruments and things inanimate, now it reſteth to ſpeake of thoſe which are done by living creatures, as men, horſes, oxen, ſwine, bees, apes, ſerpents, and divers others, the which are not without venome. The Signes are evident: the Judgements are, that thoſe which are venomous, are moſt dangerous, for if good order be not taken, they goe to noble parts, ſo that death doth enſue: Paulus Ægineta reporteth that mans biting when he is faſting in the morning, is very venomous. Gordonius lib. 5. cap. 25. &c. ſaith, that the biting of a madde dogge is moſt dangerous, for albeit the ſick feele not much in the beginning, yet after a moneth or a yeare it doth appeare, for in that time it ſæketh the heart, being of nature and qualitie to ſæke the deſtruction thereof. I knew a boy in London bitten with a madde dogge, and being well ſix wækes dyed afterwardes. Antonius Benevenius counſeleth to take

Signes Judgements.

Celſ. ibid.
Plì li 23. ca. 1.
Arnald. lib 3. brevi. cap. 13.

take Treacle with wine and miniſter to ſuch as are bitten, or hurt by venomous beaſts, alſo the hearb *Betonica*, bruiſed and put on the wound; in like manner it ſhall be good to apply ventoſies with ſcarrifications, alſo ſucking with the mouth by medicaments attractives, by cauters and ſuch like. If the wound be little, we waſh it with Drycrato warme, after the ventoſies are taken away, it ſhall be good to open little Dogs, Cats, or Foules and lay on it, ſometimes to apply cauters actuals, to conſume all that which is affected. If the beaſt be very venomous, ſalt or Bryne with a little Honie, in the which Mepeta hath beene ſodden is very good. And likewiſe the Treacle of Andromach applied in form of a plaiſter. Or this, *Rec. picis nigræ, axungiæ vervicinæ, olei antiqui an. partem unam galbani unc.* 1. *fiat unguentum*: the unguent of Divus is good for all wounds both venomous and not venomous, in all this time we muſt comfort the noble parts, give drinks of triacle and mithridate, and let not the ſick ſleep. If the venom be diſperſed through the body, uſe purging, vomiting and bleeding, alſo provocation of ſweat and urine. The venome by theſe meanes being taken away, proceede in the cure, as is ſayd in other wounds. As for the ſting of the Bee you ſhall preſently pull it out, thereafter rub the part with the juice of Pallowes.

Cure.

Paul. 5. ca. 27. Gal. 13. thera. cap. 6. Bioſ li. 8 ca. 14 Theodor. lib 2. cap. 19. Ætius lib 4. ſerm 1 cap. 10.

Paul. 5 cap. 5.

Chapter X.

¶ Of Wounds in the Bones.

HAving ſpoken of wounds in the fleſh, vaines, arterias, nerves, ligaments and tendons, now we will intreat of thoſe which happen in the bones, which is an incision done by ſome inſtrument that cutteth, thruſteth or breaketh, ſometimes ſuperficiall, otherwiles through the ſubſtance thereof. The Judgements as ſaith *Hippocrates*, if Eryſipelas doe happen in a bone uncovered, it is an evill

Definition. *Gal 6 therap.*

Judgements.

Fillop. expo. in 1 hour. *Hip. de vul* *Lib. 1. cap. 16* *Lib 9. ſua medicina*

ſigne: if the great bones be hurt, as the thigh, legge, or arme, it is without all queſtion very dangerous, if by the ſtroke of inſtrument any peece of bone be ſeperated, then muſt by fit medicaments helpe the ſeparation, and not draw it by force, for that cauſeth great accidents, as fiſtulaes, fevers, ſincope, convulſion; as ſaith Avicen. The Cure is not different from the curation of other wounds, if the bone be broken or cut, it muſt be bound and dreſſed as ye ſhall heare in the Chapter of fractures. If it be diſcovered, we put on it, as counſeleth Avicen, the powder of myrrhe, which cauſeth the fleſh to grow on it, then uſe incarnatives, deſiccatives, and cicatrize the wound as others.

Cure.

Avi lib. 9. ſua medicina

Chapter XI.

¶ Of Wounds in the Head.

HEre it ſhall be neceſſary to underſtand, that in our bodies there are three noble parts, whereby we are governed, and without them can doe nothing, as the braines, the heart, and the liver, for the which three parts nature hath ordained for every one a ſeverall domicill, as the head for the braines, the thorax or breaſt for the heart, and the inferior venter for the liver, the which three domicilles being wounded, there muſt ſome other particularities be obſerved for curation thereof, then ye have heard. Therefore wee will diſcourſe of them ſeverally, and firſt of the head.

Definition. Hip. de vulner. capitis.

The head, wherein are contained the braines, is ſubject to ſolution of continuitie, which ſometime is ſimple, otherwhiles compoſed with fracture of the crane, ſome penetrateth the membraine, other the proper ſubſtance of ꝓ brains.

Cauſe. Judgements. Signes.

The Cauſe and Judgements are, as ye have heard in the Chapter generall of Wounds. The ſignes of the ſimple are as in others: the ſignes of fractures mortall in the skull, are ſever before 13. dayes in Winter, and 7. dayes in Sommer, evill colour of the wound, livide, little quantitie of matter,

matter, the skinn dzie and aride, the toungue blacke, avoy-
ding unawares of excrements and water, the sick raveth,
pustules in the tongue, convulsion in the part opposite,
some fall into Apoplexie, and death followeth. The signes
of healing of fractures in the head, if after the head be tre-
pained, or the bone cut out by stroke or otherwise, the mem-
braine called dura mater, being of naturall colour and mo-
ving, the flesh that groweth, be red, the sick removing
well his neck and jawes, all these are good signes; other-
wise not. The simple Wound is cured as others: the
composed with fracture and other accidents is cured after
divers manners, according to the diversitie of the fracture,
as yee shall heare. The bone is sometime broken superfici-
ally, otherwhiles to the middest, and sometime thorough
both the Tables, offending the membraines that cover the
braines of the which fractures there are five kinds, the first
is called fissure or cleft, which shall be knowne by incision of
flesh to the pan in forme of S. George crosse, then separate
the crane from the pericrane, put in lynt or caddie to dilate
the wound, to the end the trepan or other instrument touch
not the flesh: if in cutting any vaine or arterie it bleed, it
must be knit. Then shalt know the cleft by rubbing on it
with thy nayle, which if you suspect to be in both the tables,
cause the sick to hold his mouth and eyes close, holding in
his breath, and if there issue out humiditie by the cleft, be as-
sured that both the tables be riven, for the which wee must
rather with trepan, rongin, or other instrument cut the bone
to *dura mater* taking away the least you can of the said bone
as counseleth Celsus, giving onely issue to the blood and
matter contained in the place. The second kind of fracture
is called contusion, which is oftentimes so great, that it se-
parateth the crane from the flesh, for the remedies whereof
we use sections to evacuate the blood, yet applying no hu-
mide remedies which are contrarie to the bone of the head:
sometime the cranium is prest in by the stroke, chiefly in
children, that have the bone yet soft, which sometime rise of
themselves,

Cure.

Vol. li. 1. cap. 2. Hip. lib. de vulneribus capitis.

S. *Georges* Crosse.

Fallop. exposit. in 1. lib. Hip. de vulne. capitis. cap. 23.

Largellus. Chirur. parva. cap. 8.

themselves, if not we apply ventosies and cause the sick to hold in his breath to make it rise, emplaisters which have the force to draw. If for all this it doth not rise, incise the flesh and apply a tirefound, if that be not sufficient, apply a trepan, then an elevator. The third kind, is pressing down of cranium which cometh by the weight of the Instrument it is done with, or else with a fall from some high place and is reduced as the precedent, if it be pressed down by peces, it must be lifted with the elevator or pincetts, next to draw these peces, without the membrains, apply not the trepan if the bones be altogether broken. The fourth kind, is called incision in the bone, whereof there are divers kinds according to the diversitie of the Instrument, according to the which we must divert the remedies: if it chance the flesh and bone be all cut, thou shalt by the counsell of Celsus, evacuate the blood if any be, cleanse and dresse well the wound close the bone with the flesh, sow up the wound, leaving a space for the tent to evacuate the matter in both sides. The first kind of fracture, is called counterclift, that is, when the cleft of the bone is in the part opposite to the force, and of all fractures this is the worst, and deceiveth most the Chyrurgion, for in it there is no signe but conjecture, and by feeling of the hurt man, in ost putting his hand on the place, and if he got the stroak with violence, falling after he got it, and did vomit, notwithstanding there be no cleft where he got the stroke. I have known sundry die in this case, chiefly of the battle of Sandis in France a valiant Captain of Paris, who had a stroak on the right parietary, who notwithstanding of all handling by skilfull Chyrurgions, dyed within twentie daies, at which time his *Cranium* was opened, and there was found great quantitie of blood under the left parietarie, with a cleft in the same. There is another kind of maladie, called commotion or astonishment of the braine, the which causeth the same accidents, as the fracture of the *Cranium*, and is caused by falls from high places, stroaks, shot of bullets, launces, or by the sound of a Cannon-shot, or

Celsus.

Remedies in contusion fissure the 3 kind of fracture

Captain. Multo.

Astonishment

or with the hand, as ſaith Hippocrates ſpeaking of a man, who gave a young woman in playing a little blow on the *vbregma*, who incontinent tooke a feaver and convulſion, voyded humors by the eare, and ſo dyed. *Sect. 3. Aphoriſm.*

We muſt underſtand that any violent ſtroke may aſtoniſh the head, and be occaſion to breake baines & arteries, not only of thoſe which paſſe betweene the ſutors, but alſo thoſe betweene the tables, for the ſuſpention of *dura mater*; of the which commeth great flux of blood, which runneth betwixt the bone and membraines, or betwixt the membraine and braines, which afterwards doth rot and cauſe many accidents, as dimneſſe of ſight, vomiting of choller, which chanceth by reaſon of the nerves of the firſt conjugation that hath connexion with the ſtomacke; in like manner, inflammation of the membraines, which communicate to all the body, and cauſeth feaver, raving, apoſtume, corruption in the braines, and death. The wounds of the head muſt in no wiſe be neglected, albeit they be but ſmall, for oftentimes in little wounds come great accidents, and eſpecially in bodies evill diſpoſed. The Cure hereof conſiſteth, firſt in abſtaining from wine and ſtrong drinke, uſing Ptyſon or ſodden water with a little ſtrupe of Violets, or Acetoſe, called *Potus divinus*, ſo continue till the accidents be paſt, let the ſick eate little and of good digeſtion, as Capons, Chickens, Pigeons, Veale, Mutton, and ſuch like, uſing a ſtraight diet till the accidents be paſt, in the meane time he may uſe Comfits of Tarvie, conſerve of Roſes, for ſuch things kæpe the vapours from aſcending to the head, the ayre muſt neither be hot nor cold, ſkæpe moderately, and purge gently with Cliſters, blende in the cephaliche draine, according to the accidents. Parey telleth of a man, from whom he drew an hundred ſaucers of blood in ſome dayes, who thereby was cured, and otherwiſe had dyed. Shave the head and apply Cataplaſmes of flower of Beanes, and Drymell, with the oyle of Roſes, and ſuch like, that are ſomewhat cold and humide, uſe frictions and ligators on the extremi-

Divers ſymptomes.

Cure. *Hip. li de vul. cap 2.*

Parem.

Shave the head.

ties,

ties, ventoſies in the ſhoulders, ſometime to open the vain *puppis frontis ſub lingua*, and the arterie on the temples. Abſtain in the ſickneſſe, and long after, from women and perturbation of the minde. The particular is thus, firſt wee conſider if the bone be broken, that muſt be trepained, conged, or lifted, for the doing whereof, the place muſt firſt be inciſed as ye have heard; yet it is not needfull to trepane in all fractures and cleſts, for ſometimes the firſt table is offended, yet not penetrating to the duplay, otherwiles the duplay contuſed, the ſecond table whole, ſometimes the broken bone is a little lifted, ſo that the matter contained hath place to paſſe, and therefore it is not needfull to trepan. If any peece of bone do fall on the *dura mater*, it muſt be drawn by fit inſtruments, the Trepan is good, when the cleſts are ſo little that the matter cannot evacuate, yet it is not met to trepain in all fractures as ye have heard, not to diſcober the brains, without neceſſitie and good judgement, ſo that the yong Chyrurgion may not ſo haſtily, as in time paſt, trepan for every ſimple fracture: I will ſhew when trepaning ſhould be uſed, for what cauſe, and in what places, alſo the way to trepain well. Firſt, the Chyrurgion ſhall well conſider the ſtroak and ſymptomes, if it be little and the vain betwirt the two tables, or thoſe that hold up the *dura mater*, with the crane be offended, and the blood fallen on the membrain, then the trepan muſt be uſed to withdraw that matter, which otherwiſe would cauſe death, ſometime it muſt be uſed for the out-taking of the little bones that prick the membrain, alſo that more commodiouſly we may apply our remedies: In all theſe things Hippocrates counſelleth to trepan. When the fracture is in the firſt table, wee uſe the trepan exfoliative to give iſſue to the blood which is betwirt the tables. The time we ſhould trepan is two or three dates at the furtheſt after the hurt, long delay cauſeth defluxion of humors on the *dura mater*, which putrifieth and cauſeth inflamation, ſo incontinent after wee have perceived the offence of the crane, and that the membrains ſuffer, which

Fallop. expoſit. in lib. Hip. de vulner. capitis cap. 17. & 18

Hip. de locis in homine.

Hip. de locis in homine.

Hip. Cel. 2. 2.

is

is knowne by the ſound or finger, wee ſhould trepan in the beginning: yet ſome doe ſtay untill the 7. 10. or 14 day, which is dangerous, for the which cauſe be adviſed in judging therein. Then we muſt know what places may induce the trepain, and which not, for to avoyde divers accidents, conſidering firſt if the bone be broken and ſeparated in diverſ peeces, which if it be, the peeces muſt be liſted by fit Inſtruments, and not by the trepan. In like manner, wee muſt not trepan on the fractures, for that catteth the vains, arteries, and filaments, which paſſe betweene the pericrane and *dura mater*, and cauſe great dolour and hemeragie of blood: for the which cauſe, if occaſion conſtraine us to trepane in thoſe parts, we apply the trepan on both ſides of the ſuture, for the avoyding of the aforeſaid accidents, as alſo for evacuation of the humor contained. The Trepane in like ſort muſt not be applyed no the open of the head in yong Children, being yet ſoft and not ſolide, nor on the temples, by the muſcles temporall, where there is abundance of arteries, membraines, and nerves, whereof commeth great flur of blood, fever, convulſion, with other evill accidents, yet if fracture doth chance in thoſe parts, wee apply the trepan a little above the ſaid muſcles temporall. Wee muſt not trepane on the bone *Petroſſa*, which is under the ſaid muſcle, nor on the bone of the eyes, becauſe there is great cavity, full of ayre and humiditie, ordained by nature to prepare the ayre that goeth to the braines. And theſe are the places which we ſhould eſchewin applying the trepan, yet I have ſeene ſome trepanned in theſe places, and healed, but not without great hazzard. The way to trepane is thus: Firſt ſcituate the head of the hurt in good ſcituation, & holden by ſome body that it doe not wagge, cloſe his eares with Cotton, have a good fire, leaſt the cold ayre enter on the membraines, which may make putrefaction; then the Trepan perforative ſhall be applyed.

Hip. de vul. capit. 8

Hip. de foſſ. capit.

A Trepan,

A Trepan, with other Instruments for the heads.



to

to make a hole for the piramide of the great Trepan, next apply the whole Trepan with the piramide, turning it about softly, till thou hast made away with the teeth of the Trepan, then take out the piramide, otherwise it shall passe and offend the membrains, continue in turning softly the Trepan, sometime to rest it, to put off the sawings of the bone, and when thou art at the duplay, which shall be perceived by the out-comming of the blood, you shall consider if it be needfull to passe further, as ye have heard, take good heed in trepanning of the second table, lifting off the Trepan and sounding if it be near cut, if it be more cut on the one side than on the other, presse the Trepan on the thickest part, and in this take good heed, for often in cutting the one more the other, then scratheth the *dura mater*, which causeth inflamation and death: being almost cut, assay with the elevator to draw it without violence, if there be much of the sawings on the *dura mater*, take them out. This I thought good to advertise the young Chyrurgion touching this operation, which being done, then perceivest if the membrain be inflamed or in any wise altered as oft happeneth and is most dangerous, for which we give glisters, take blood, and use fomentations on the place of anodines and repercussives. If there be alteration, make a medicine of honey of Roses, sirrope of Wormwood, aqua vite, with a little Aloes and Myrrhe, some add to it a little white wine. If there be great putrefaction, put thereto a little Egyptiac: if there be neither inflamation nor alteration, it shall suffice only a little aqua vite with honey of Roses, so continuing till the membrains be mundified, applying alwaies the medicines hot, and cure it afterwards as other Wounds. Use alwaies as well in this, as all wounds of the head, the emplaister Veneticum, prescribed in The poor Mans Guide and also the emplaister of Betonica, or Diacalcios malaxed with wine. There is great Judgement to be used in doing this operation, and few there are found that doe it well. Many I have seen of very learned

Fillop expoſit. Li. hip de vul. cap. cap 36. Celſus.

medicina cephalica.

Fillop lib cita. to cap 39. & 91. & 92.

learned and expert men, and heard of divers to my great joy & comfort, among which M. George Baker sometime Chyrurgion ordinarie to that worthy Prince Quæn Elizabeth: and now to his most sacred Majestie, a Man of great learning and experience, most fortunate and dexter in this operation, like as in all other operations of Chyrurgery: God increase the number of such in this Kingdome.

Chapter XII.

¶ Of Wounds in the Thorax.

Definition. The Thorax which is domicill to the heart and lights, suffereth solution of continuity in divers manners, whereof some are externe and doe not penetrate, others penetrate to some of the parts contained therein, as the heart, lights, mediastin & diaphragma, some passe throughout, of the which some are curable, some incurable, and some mortall, as yé habe heard in the Chapter Generall, as also the Causes and Signes. Those which penetrate at the back are more dangerous than at the interior part because of the vains, arteries, nerves, and such like. The Cure consisteth in good diet in the six unnaturall things, purgation, letting of blood according to the temperature of the body, time, and Region. Those which doe not penetrate, differ nothing from the generall of other simple wounds, saving only in binding, which must be incarnative, sometime narrow, otherwhiles broad according to the difference and scituation of the wound. Touching those which penetrate, there is great diversity of opinion in the cure, some are of the opinion to consolide the wound as soon as may be to hinder the externe aire to hurt the parts vitall, others give councell to hold them open, and in case the issue be not large enough, to dilate it, and make it larger, that if there be any blood or other thing in the capacity, it may avoid, but which of these waies ought to be followed, the judge-

Rol. li. 3 ca 25.

Cause.
Signs.

Cure.

ment

ment of the expert Chirurgion is to be required: knowing firſt, if it doth penetrate, which ſhall bee done in cloſing his mouth and noſe, and then holding a candle to the wound, if the aire cometh forth, it is ſure that it penetrates; if there be blood in the capacity, you ſhall know by the ponderoſitie of the diaphragma, accompanied with dolor, ſever & vomiting: if any chiefe part be offended, ye ſhal know by the ſignes ſet down in the Chapter Generall. If neither blood be ſhed, nor any part offended, ye ſhall conglutinate the wound, putting no tent therein, uſing only a little of my balm ſet down in the Chapter of Gunſhot, in the mean time uſe ene potion vulnerate in ſuch as doth penetrate. If there be any little thing left in the wound, nature will eaſily diſcharge it, for (as ſaith Galen) it doth expell not only that which offendeth, through the pannicles, but alſo through the middeſt of the bones. Thoſe which penetrate with effuſion of blood on the diaphragma and are not mortall, muſt be tented with a thread at the tent, to the end that if it goe in, it may be drawn out again, cauſe the ſick to lie on the ſore ſide, chiefly when you dreſſe him, that the blood and matter may iſſue at the wound, uſing alwaies injections of barley, pimpernell, piloſell, bugloſe, ſcrofularie, cherwil, all ſodden in water, putting thereto a little honie or ſirrope of roſes with a little white wine for a certain time. Sometime the blood cannot evacuate by the wound, it being higher then the diaphragma, which cauſeth difficulty of reſpiring, for the which make an iſſue, as ye have heard in *Empiema*, to evacuate the humor contained, if the putrefaction be great, mixe with the foreſaid injection a little egyptiac, the wound being mundified with this or ſuch like, thou ſhalt uſe this injection, which is ſomewhat deſiccative.

Rec. roſarum, balauſtiorum, myrtilorum an. unc. 1 myrabolani, citrini an. unc. 2 mellis roſati parum, coquantur in aqua plantaginis, ad conſumptionem tertia partis: with this thou ſhalt waſh the wound, twiſe a day.

Signes of the wound penetrate.

Com 7 aph.

If the body be of an evil temperature, or that the nether part of the lights be hurt, it stanch not quickly, but will void much; then we must use a tent of Lead or Silver, that is hollow within, that the matter may evacuate, we use also this decoction to drink in the morning, fasting four hours after. Take Scabius, Buglosse, Borage, Pimpernell, *Aristolochia*, Agrimonie, Betonie, *Piloſell*, an. *M. ſe uvarum munditarum, ſeminis hypericonis, & cardui benedicti* an unc. 1 *florum trium cordialium P.* 1 *coquantur in aqua, adde in fine vini albi parum, ſyrupi roſati, & diamomi* an unc. 2 using on the wound the emplaister *Diacalcitros* malaxed in wine. If notwithstanding these remedies, it remaineth long in healing, and doth begender in fistull; for the curation of the which, have recourse to the Book of Ulcers and Chapter of Fistula.

Chapter XIII.

¶ Of Wounds in the Bellie.

The inferiour bellie, wherein the Liver with the Kidneys and Milt are inclosed, is often wounded in divers manners, some penetrates, and some not; offending the parts contained, as the Stomach, Liver, Milt, Kidneyes, Gut, Vaines, Arteries, the Epiploon, Ureters, or some other parts: The Causes, Signes, and Judgements whereof, ye have heard in the generall Chapter. The Judgements, those that doe not penetrate, are cured like other simple wounds; those which penetrate into the capacitie, require another manner of cure. Wounds in the five, in the oblique muscles, are not so dangerous as those in the transversall, because that the perton is uneasie to sow specially in *musculo recto*, which descendeth from the breast to *os pubis*. Also little wounds in those places are more difficill, than those that are more ample, in them if the guts come out, they tumifie, and so are uneasie to put in again: for the which use such

Cause. Signes Judgements.

Pa li 6 ca 52

ſuch remedies as yée have heard in Axumphalon, uſing the ſuture Gaſtrorraphick; if the guttes be pearced, they muſt be ſewed with ſuture pelitey (as was ſhewed in the generall Chapter) & caſt on the wound the powder of Aloes, Myrrhe, Maſtick, and Bol, and reduce it ſoftly into the own place, uſing an emplaiſter retentive and agglutinative. If the *Intenium* be ſut, it is impoſſible or moſt difficill to heale, by reaſon of the great vaines contained therein, if any of the guttes have changed colour, there is no hope. If the Caule or *Omentum* be altered, it muſt be knit and reduced, as yée have heard in the generall Chapter. In all woands in the bellie uſe Gliſters and injections, aſtringents, and deterſives, chiefly if the great inteſtine, matrix, or bladder be hurt. And ſo we end this Booke of Wounds, and ſhall follow out that of Ulcers after the ſame manner.

(*.*)

Albu. lib 2. cap. 45.

Hip. apho. 58. ſect. 6.

Rol. li. 3 ca. 30.

The seventh Book:

Of Ulcers.

Which containeth X Chapters, whose Contents bee these; By PETER LOVVE *Scottish man.*

Chap. 1. Of Ulcers in generall.
2. Of Ulcers Sanious, and their curation.
3. Of the Ulcer Virulent.
4. Of the Ulcer profound and Cavernous.
5. Of the Ulcer Sordide and Putride.
6. Of Ulcers difficile to cure.
7. Of Ulcers with corruption of the Bones.
8. Of Ulcers Cancrous.
9. Of Fistula.
10. Of Burnings.

CHAPTER I.

¶ Of Ulcers in generall.

Interloquutors *Peter* and *John*.

P. SEeing we have amply spoken of Tumors and Wounds, and of their Definition, Cause, Signes, and Cure; so in like manner wee will proceed in Ulcers, seeing many tumors and wounds doe suppure and degender in Ulcers, so it is needfull after the Book hereof, to speak of Ulcers, and first I demand what is an Ulcer?

Definition. *Gal de vlc. cap.*

Joh. It is a solution of continuitie made by erosion in divers parts of the body, out of the which proceedeth a matter purulent,

Joh. It is a corruption of the part, which nature cannot digeſt, and make it to nouriſh the ſame.

Pet. How many ſorts of ſanie is there?

Joh. Two; to wit, that which is commendable, as it ought to be, and that which is not.

Pet. Which is commendable?

Joh. It is that which is white, light, equal in conſiſtence, neither thicke, thinne, nor evill taſted.

Pet. Which is not commendable, or evill Sanie?

Joh. It is a corruption of the inſtrument, much altered through unnaturall heat, and according to that alteration it produceth evil ſanie.

Pet. What call you Pus?

Joh. It is a kind of ſanie made of the nouriture and ſuperfluitie of the member, tending to corruption by the alteration of the naturall heate and debilitie of the member, out of the which commeth a matter called *virus & ſordities.*

Pet. What is Virus?

Joh. It is that which is ingendred of the moſt ſubtill and hot part of the pituitous humor, which nature cannot digeſt by the great abundance thereof; of which Guido alledged foure kindes, cold and hot, red and watrie.

Pet. What is it thou calleſt ſordities?

Joh. It is a groſſe matter, ingendred of groſſe humors. *Gal. lib. 3. met. Gal. 3. methe. cap. 4. 6. & 7.*

Pet. What calleſt thou durities, or hardneſſe?

Joh. It is a thing hard and ſolide, not eaſie to be corrupted, which may come of three cauſes, that is, great heate, congelation, repletion, *Gal. lib. de tumoribus contra naturam.*

Pet. What calleſt thou fiſtula?

Joh. It is a profound ulcer, having the entry, hard, narrow, deepe, cavernous, from the which proceedeth a matter virulent.

Pet. What is putrefaction?

Joh. It is a change of the ſubſtance of our whole body, or of ſome part thereof, through an unnaturall heat.

Pet. What is the cauſe of putrefaction in our bodies?

Joh. It commeth, either that the ſpirit animall is corrupted, or cannot goe to the part, for cold, heat, apoſtume, poſtules, Ulcers, ambulatives, venemous; alſo putting of oyles and ſuch like in deepe ulcers, doe corrupt the fleſh, alſo too much uſing of refrigeratives in hot apoſtumes, and ligatures which intercept the ſpirit.

Three ſorts of putrefaction.

Pet. How many ſorts of putrefactions are there?

Joh. Three, to wit, Gangren, Eſtachiles, and Hiſtiomen.

Pet. What is Gangren?

Joh. It is a putrefaction of the parte having yet feeling, and differeth in that from others.

Pet. What is Eſtachiles?

Joh. It is a putrefaction of the member, or parte thereof without feeling, corrupting both fleſh and bone.

Pet. What is Hiſtiomen?

Joh. It is a whole corruption of the member, eating and conſuming the whole body away.

Pet. What is Corroſion?

Joh. It is a conſumption of the fleſh, through the bitternesſe and ſharpneſſe of the humor.

Pet. What are the cauſes of Corroſion?

Joh. The malignitie of the fleſh, the humor chollericke, phlegmatricke, ſoft admixed.

Pet. What calleſt thou Cancer?

Joh. It is a maladie of matter cold and drie, being hot by putrefaction, hardneſſe, and other ſignes, as ye have heard in his proper Chapter.

Judgements.

Pet. What are the judgements?

Joh. There are divers, according to the accidents that fall; and firſt, that ulcers remaining a yeare or more uncured, make the bone under them altered and rotten, and when ſuch ulcers are whole, there remaineth a cavitie in the parte ulcered all ulcers that are evill coloured black are eſteemed malignes, if any ulcer being filled up and ready to cicatrize, begin ſodainly to runne againe without manifeſt

Hippo. 6. lib. 45 apho.

purulent, which hindereth the conſolidation thereof.

Pet. Are they not different?

Joh. Some differ in nature, in ſubſtance, in qualitie, figure, and accidents. Difference of Ulcers.

Pet How differ they in nature and ſubſtance?

Joh. Some are ſimple in the fleſh without any other indiſpoſition, as ſaith Galen; others are compoſed with one, or moe maladies, as ulcers with intempery, corruption of the bone, Apoſthume, nodoſitie, and divers other accidents. *Tang. lib. 3. Gal lib. 2 met.*

Pet. How differ they in figure and quantitie?

Joh. Some are round, long, profound, ſuperficiall, great, and ſmall.

Pet. How differ they by accidents?

Joh. Some are putride, dolorous, fiſtulous, canerous, ſome are inveterate, ſome recent, ſome in one member, ſome in other places.

Pet. How many cauſes are there of Ulcers? Cauſes of Ulcers.

Joh. Three; primitive, antecedent, and conjunct.

Pet. Which are the primities?

Joh. Contuſion, ſcratching, heats, application of ſharp medicaments, corroſion, great cold that extinguiſheth the naturall heat, chiefly in the extremities.

Pet. Which are the cauſes antecedent?

Joh. Evill humors in the body, which come of evill nouriture, or evill diſpoſition of the body, or ſome part thereof, chiefly the Liver, ventricle, and Spilt. *Gal. de cauſis morbor. ca. 10. & cap 4 meth.*

Pet. How are thoſe humors cauſes of Ulcers?

Joh. Partly by their evill qualitie, partly through abundance of them, doe ſpoile, open and corrode the moſt debill parts of our body, not having force to reſiſt ſuch malignitie, and ſo cauſeth Ulcers.

Pet. Which are the conjunct cauſes?

Joh. The foreſaid humors conjoyned in the parts ulcered, as alſo all other violent things that have force to ulcerate the ſame part.

Pet. Which are the Signes?

Signes.

Joh. They are evident; or are in the body, & are known by the dolor, nature, or the place, accidents and excrements, and such as you shall hear in the six kindes of proper Ulcers.

Gal com. 3. aphor & lib. 1. de officina Medici & 3 de locis affectis

Pet. Which are those six kindes of Ulcers?

Joh. The first is sanious, 2. virulent, 3 filthie, 4 cancrous, 5. putride or stinking, 6 corrosive or rotten away.

Pet. Have they no other names?

Difference.

Joh. They have five other names, & first by the humors; secondly, by the matter that cometh from them; thirdly, of the accidents; fourthly, of the figurelle; fiftly, by comparing them to the similitude of Beasts.

Pet. How take they their names by the humors?

Joh. Some are of the Phlegmatick humor, and are called Phlegmaticks, some by the blood, and are called Sanguinous, by the choller Cholerick, and by melancholy Melancholick.

Pet. How take they the names of the matter?

Joh. Of the great abundance of sany or humiditie, it is called ulcer sanious, of the pus purulent, of the fozidities it is called fozid, of the virulence it is called virulent.

Pet. How take they their names of the accidents?

Joh. Of the hardnesse called callositie it is hard & callous, of the caverns it is called cavernous, of the fistule it is called fistulous, of the putrefaction putrid, of the corrosion or malignity of the matter corrosive, of the callours or hard figure turned over it called cancrous, of the dolor dolorous, of apostume apostumous. In al ulcers where any of these reign they heal not till they be taken away.

Pet. What is callositie?

Joh. It is a dry flesh without dolor, because it hath no vain to make it humid, nor nerve to give it feeling.

Pet. How is that called which commonly commeth from ulcers?

Joh. It is called sanies or matter.

Pet. What is Sanies?

Joh. It

ons, ligatures, application of emplaisters that have the force to repell the matter. The third Intention is in correcting the accidents joyned with the ulcer, as dolour, tumor, contusion, excrescence of the flesh, callosity of the lips, rottenness of the bone, varice and wormes. First then we must labour to take away the intemperie, which shall be known by the colour of the member, by the touching and feeling of the patient, which sometime is hot, sometime cold, which if it be dry, we remedie it by purgation and bleeding, also if need be, foment the place with hot water till it grow red, as counselleth Galen: thereafter use this unguent made of Malloues, sodden in water with a little hogs-greese and honey mixed with Nutritum, Ceratum, Galeni rosatum, populeon, incorporate with Plantain-water, Sorrell and Houslek. If the Intempery be humid, use unguents that dry, as Pomphol. de plumbo, cerusa, allom-water, unguent basilicon, citrinum, lyticum, de althea; or this fomentation of Claret wine, in the which hath been sodden Roses, Betonie, Wormwood, Rock-allom. If the Intempery be cold, we foment the part only with wine, wherein wormwood hath been sodden, hyssope, salamint, rosemary, unguent basilicon, and de althea. If the Intemperie be hot, we remedie it by water of Plantine, solanum, houslek, or unguentum rubrificum, cum camphora, or cerat galeni. If there be dolour with ulcer, which cometh of intempery, erosion, of a subtil humor or solution of continuitie, or plenitude of grosse humors, or a flatuous spirit, for the which take unguent populeon, oile of yolks of eggs, unguentum album camphoratum, with other such as are in tumors, if the dolour be vehement, we make a cataplasm narcoticke of barley-flower, oile of Roses, Henbane, Mandrage, Poppie, all sodden in milk. If the dolour be accompanied with tumor, first look to the cause of it, thereafter, ordain the diet strait and cold, bleeding, purging, according to the nature of the humor, with such particular remedies, as you have heard in tumors. The excrescence

Gal lib. 3 ca 8. & com in apho. 31. cap 7.

Gal lib. 2. ca. 10 & com. in apho 8

Gal 3. meth. cap. 3 & 5.

cence of the fleſh ſhall be taken away with cauters, razors, ſhears, powder of Mercurie, burnt Allom, *aſtrum, ſquama, æris, unguentum agipiacum, apoſtulorum, vitriolum, romanum.*

Lib. 5 meth. cap. The hardneſſe is cured by Remollients and Reſolvents, as goſe, henns, duck, and calves greaſe, oile of Lillies, *lumbricorum, vulpium, maſcillaginis,* of *althea,* and *fœnugreci. baſilicon, diachilon magnum, de muſcilaginibus,* thereafter ſcarifie

Gal. 4. meth. cap. 2. as counſelleth Avicen, then put powder of Mercurie or cut it with a Raſor to the ſoſt part. If the ulcer become black and red, ſcarifie it, and let it bleed well and apply things drying. If it be accompanied with varice, it muſt be taken away as yee have heard in the Chapter of Varix. If there

Paul. 4 ca. 42. be rottennes in the bone, yee ſhall have recourſe to the proper Chapter. If there be wormes in the ulcer, we muſt conſume the rottenneſſe and humiditie they are ingendered of, and kill them alſo, with the decoction of Wormwood, Agrimony, Marubium, Centory, Calamint, which is good to waſh the Ulcers alſo in the eares, faſting ſpittle is good for Ulcers in the eares, and other parts, as ſaith Archigenes and Theodoricus, and make the Cicatrize well favoured, with the foreſaid decoction waſh the Ulcers, as alſo with oyle of wormwood, the powder Aloes, mixed with the oile of Abſinthe and a little war is very good. Millefolum taken the weight of one dram in white wine killeth the wormes in the belly alſo. The fourth intention conſiſteth in healing

Gal 5 meth. cap. 13 & 3. meth cap. 3. Paul. 4 ca 55 of the places ulcered, which ſhall be done in taking away the impediments, as yee have heard; thereafter, cicatrize the ulcer with ſuch things as are ſet down for the conſolidation of Wounds.

Chapter III.

¶ Of Ulcers virulent and corroſive.

HEre yee ſhall hear of thoſe two Ulcers which are not much different: thoſe Ulcers which have certain virulencie

manifeſt cauſe, it is in danger to become fiſtulous. Hippocrates ſaith, that ulcers which have no haire about them, are vneaſie to heale and cicatrize, alſo thoſe ulcers which come by reaſon of ſome maladie, as hydropſie, and cacherie, are hard to heale. Hippocrates ſaith alſo, if any man have an vlcer, whether it become to him before his ſickneſſe, or in the ſickneſſe, and the ſick die, that vlcer ſhall be before he die, dry, blew, or pale. The ſame Hippocrates ſaith alſo, that thoſe who have vlcers accompanyed with tumor, doe neither fall in convulſion, raving, nor frenzie, but if the tumor goe away without manifeſt cauſe, and if the vlcer be in the back, the ſick falleth in ſpaſme: if before in the bodie, in raving and frenzie: if in the thorax before he falleth in empiem and pluriſis, all vlcers accompanied with varices, or intemperie; & thoſe alſo that have the ſides hard, are difficile to heale: all vlcers in the extremities af the muſcles of the legges and armes, are difficile and dangerous: as alſo thoſe, which penitrate in the body: ſuch vlcers as chaunce in the extremities of the body, as in the face, or hands, make oft phlegmons, or other tumors againſt nature, and in criſis of a maladie, are difficile.

Hip. 6. lib. aphe. 5.

Lib 1. prog. cap 6 lib. 10. meth.

Lib. aphe. 65.

Pet. Which are thoſe which are of eaſie curation? Cure.

Joh. Thoſe which happen in bodies of good complexion, and in the which none of the foreſaid accidents doe happen.

Pet. Which are the cheife cauſes that hinder the healing of vlcers?

Joh. According to Galen the chiefe cauſe is want of good blud to engender fleſh, or elſe that it is evil either by quantitie or quality of it ſelfe, alſo dolour, intempery, apoſtume, contuſion, Eriſipelas, *Echimois*, the South wind which is hot, humide and putrefactive, enemie to al wounds and vlcers as ſaith Guido, alſo ſuperfluous fleſh, hardnes, callofity of the ſides, corruption of the bone, varices, hemeragie of blud: alſo roundneſſe in figure, for the which Hippocrates counſeleth, if the vlcer be round, to put on it another forme. Imbecilitie of the part vlcered, indiſpoſition of the liber

Celſus lib. 7 cap. 3. 4 meth. cap. 5. & 2. Alex apho. pro. 199. lib 1. & com in aphe. 21 lib. 6.

Gal lib 5 me thod cap. 10.

lyver or mult, retention of the monethly courſe in women, and of the hemorrhoides, and alſo the applying of medicines unmeete for ſuch ulcers. Many ignorant Barbors faile herein, thinking one kinde of emplaiſter to be good for al ſores, in the which they are deceived: for he that would cure ulcers, muſt firſt take away the cauſe, as alſo the impediments and accidents, otherwiſe he travaileth in vaine, as ſaith Paulus; for the performance whereof, we muſt ordaine firſt good diet, ſecondly, take away the cauſe antecedent, to wit, the humor which falleth, which ſhall be done by purging, bleeding, according to the cauſe and the part: thirdly, correct and heale the accidents and inſtil puſtions which accompanie the ulcer: theſe things done, he may come to the curation hereof, as ſhall be particularly ſet downe of every kinde of ulcer, in his proper place.

Paul. 4 ca. 40. 41. & 42.

Gal. 4. meth. cap. 1.

Chapter II.

¶ Of Vlcers ſanious and the Curation thereof.

As in the former Chapter, I have ſpoken of Ulcers in generall, of their difference, cauſe, ſignes, judgements, and cure, ſo now I will particularly intreat of them. All Ulcers are either ſimple or compoſed with ſome other malads: the ſimple Ulcer requireth onely deſiccation, thoſe which are compoſed, and joyned with ſome other accident, except thoſe accidents be taken away cannot heale, for the cure of the which, there are foure Intentions: firſt in the way of life, which ſhall be according to the ſtrength of the ſick, nature of the malade, and abundance of the humors in the bodie; as if the humors be hot and ſharpe, we ordaine cold things. The ſecond Intention is in diverting and intercepting the matter antecedent, which is done by purgations and bleeding if the ſtrength permit, alſo by frictions,

Gal 4 me. ca. 1.

Cure.

lencie and venenositie are called virulent, but after the bitternesse augment and corrodeth the flesh and maketh it greater, it is called corrosive, or eating ulcer, if it eat much of the flesh not going deepe, it is called ambulative, if yet it doth augment, it becommeth in cancer or lupus, as yee shall heare. The cause of these ulcers are evil bilious humors, sharp & biting, the which get some malignitie, venenositie by their adustion, and happen oft after Herpes or wounds that have been irritated by sharp and biting medicaments. The Cure is first in the manner of life, according to the disposition of the body and humors that raigne, next in purging partly for the evacuation of such sharpe humors, thirdly, in applying fit medicines on the ulcer, as if it be very humid, the medicaments must be more drying and like to the part, as this, take water of allom or plantine, decoction of cipres, chebalon, bark of Pomgarnet, and such like. If there be great heat in the place, cool it by refrigeratives, and desiccatives. Guydo for such ulcers useth a cake of lead rubbed with quick silver, *unguentum pompholigos, de minio,* or *de plumbo, unguentum rubrum cum camphora*, take any of these mixed with a little *tuthia preparata, plumbi usti, corussa lota*, beaten in a morter of lead, with water of plantine, a little *terra sigillata*, with a little oyle of Roses, make an unguent. If the malignitie be great in the body, drie and consume these humors, with canters actuall, powder of Mercurie mixed with unguent rosat, till such time the malice be consumed, thereafter wash it with the decoction above specified. If by all these remedies we profit not, or if the patient may not suffer the actuall cauter either through feare or tendernesse, we use the *trochisces* of *diasdron de musa, arsenic, coppe rous*, using always defensives to repercute the flurion, which may come through violence of these remedies. If these be not sufficient, Avicen counseleth to cut the member infected and ulcered.

Definition. *Paul. 4 cap. 44 Lan cap. 11.*

Cause. *Lib. 4 meth. cap. 4*

Cure. *Gal. 12 meth.* *Galen 5 meth. cap. 10.*

CHAP.

Chapter IIII.

¶ Of the Ulcer profound and Cavernous.

Definition.

The Ulcer cavernous hath the orifice streight and the bottom broad, many cavernes, some right, some oblique, with divers fractuosities, without hardnesse and callositie, & so differ from fistulaes. The cause of such Ulcers is Apostumes, wounds evil healed, in the which the matter hath bæn long retained, and the orifice higher then the bottom, as ye have heard, the partie debilitated, so causeth defluxion of superfluous humors, not only of the part but of all the body. Thou shalt know these cavernes by the sound, either of lead, silver, or a wax candle, and humor therein contained by the injection, if it be white, & cerusse, it is cold, if it be subtill and reddish, the matter is hot, those that are easie to heale have little matter with deminution of colour and humor.

Cause.

Gal. ad glau. ca 8 & li tumo contra naturam.

Signes.

The Cure of such Ulcers consisteth first in the way of life, with remedies, according to the qualitie of the humor and nature of the part ulcered, as also the scituation, the colour, intemperie, and other accidents, that entertain the ulcer. As for the topicall remedies, if the orifice be incommodious scituation, that the matter may evacuate, by unguents, emplaisters, mundificatives, desiccatives, with ligatures, coppersses, fomentations and injections of red Wine, if the orifice be high, and the bottom low, the member must be scituate in such fashion that the nethermost part be as ye have heard in wounds cavernous. If by the scituation, the matter doth not evacuate, or if it be in such places, that it cannot be so scituated, then make an incision from the orifice to the bottom with mæte instruments, thereafter appease the dolour, and flur of blood; if it be in such parts that this incision be not safely done, then make an issue in the bottom, and put a seton as in wounds cavernous, or a tent with

Cure.

Gal 3 meth cap 8 & 9. & li. 4 ca 7. & 2. ad glau cap 8.

Paul 4 ca 40.

with ſome fit medicine, that mundifieth as ye have heard in tumors, or this, *Rec. mellis lib.* 2 *viridis æris* 5 *olei roſati lib.* 1 *ariſtolochiæ longæ, albuminis, ceruſæ an. unc.* 1 *fiat unguentum*, or waſh with wine and honie called *mulſum*. If the humor be ſanguinolent and evill ſavoured, waſh the Ulcer with Drymell, Allom-water or honie, *aqua marina*, with a little egyptiac. Aegucrats counſelleth to diſſolve egyptiac with hiromell, which mundifieth and correcteth the malignitie. If the matter be ſubtill and watry, take barly, agrimony, centory, wormwood, and ſeeth in honey and vinegar, if being cleanſed uſe this incarnative & glutinative, take the rots of Iris, Plantine, Agrimony ſodden in water and honey. Avicen counſelleth the *emplaſtrum catholicon & cenerum*, which is of a marvellous effect in this, put alſo in the *emplaſtrum de mimo, diacalcitos* or *nigrum*, compoſed with galls, honie powder of Iris, aloes, myrrhe, and ſuch like. Iogar, ſetteth a marvellous good medicine to conglutinate Ulcers made thus, *Rec. de collirio hordei lib.* 1 *mellis roſati unc.* 3 *ſarcocollæ drag.* 2 *myrrhæ, thuris, an drag.* 1 *vini odoriferi unc.* 3 *bulliant ad conſumptionem tertiæ partis addendo aloes parum*, ſtrain this and put it on any in the ulcers and binde it upward, ſhift it once a day, till the ulcer be whole, uſing alwaies the emplaiſter of Diapalma, mixed in Claret wine, fomentation with wine, coppeſſe, and bandage, wet in the ſame.

Toga li. 3 *cap.* 17.

Albu. lib. 2. *cap* 46.

Lib. metic. 3. *cap.* 3.

Chapter V.

¶ Of the filthy and rotten Ulcer.

Theſe Ulcers which are accompanied with abundance of matter thick, tough, and evill coloured, are called by Guido and others, ſordide and filthy, if they augment, rot, and mortifie the fleſh, ulcered, voiding a matter evill ſavoured and cadaverous, they are called ulcers putride. If the maligitie and rottenneſs becometh in gangren, it is called ulcer

Definition. *Gui. tract.* 4. *de ulceris.*

Cauſe. ulcer gangrenous. The cauſe is abundance of groſs humors, proceeding of an abuction & ebulition of blood, for the which they become venomous and maligne, as chanceth after carbuncles, authrax, tumors, and wounds, evil ordered. The

Cure. Cure of them conſiſteth, in regiment as ye have heard in

Paul. 4 ca. 45 the Chapter of carbuncle, the uſing of ꝑ decoction Gajaci is good to dry up the humors, and evacuate them by ſweating. Avicen commendeth much purging of the body to diſcharge the part of theſe evil humors, by medicines munificatives, like as humiditie by drying medicines, by ventoſies, ſcarrifications, horſleaches, epithems. Topical remedies are firſt

Gui. 3. meth cap. 6. & 7. to waſh the place with hidromell and aqua marina, apoſtolicon, or egyptiac, put on the ulcer, applying on it an emplaiſter de bolo, with cloth wet in Oricrate. If the matter

Gui. traſt. 4 Hally Abbas. ingender corruption, waſh it with Oricrate, water of cenders or white ſope, with this emplaiſter made of ſalt fiſh, flower of Ariſtolochia longa and oroby, ſodden in wine and put on the ſore. If this be not ſufficient, take this medicament, which is greatly approved by Avicen, *Quid recipe dragaganti rubri dicti auripigment unc. 1. calcis viva, aluminis corticis mali punici, ſingulorum, unc. 6. thuris, galarum, ſingulorum unc. di. cera & olei, an. quantum ſufficit, fiat unguentum*, with deſenſives of Bol. If for all this, the ulcer augment and grow worſe, we uſe more ſtrong remedies to conſume the putrefaction, as cauters actuals, razors, or other medicaments that have vertue to make a ſcale, according to

Lib 7 aph 9. the ſaying of Hippocrates, that which healeth not by medicaments, it healeth either by yron or fire, which ſhall be continued till ye come to the good fleſh, and ſhall be known by the colour. Arſenick or Nitriol roman is good to ſeparate the rotten from the whole, being mired with aqua vite, bonie and egiptiac. If by all theſe remedies ye profit not, but that the evil doth augment, the part muſt be cut off, for the ſafetie of the reſt, as counſelleth Celſus

CHAP.

Chapter VI.

¶ Of the Ulcers difficile to heale, called *Cacethe* and *Chironia*.

Ye have heard, that ſome Ulcers are eaſie, ſome hard, and ſome indifferent, but thoſe Ulcers which heale not after all things duely uſed, are called Cacoethici, or malignes, and long in healing, and by Galen, Diſpulotica. The Cauſe is, the evill temperature of the body, as, if the humors be vitiated, called by the Græcks Cacochimie, or if there be abundance of humors, called by the Græcks *plethore*, they muſt alſo be evacuated, the calloſitie or intemperie in the part muſt be taken away. The ſignes are, the diuturnitie of the Ulcer, the indiſpoſition and malice of the humor, the hardnes and calloſitie of the lippes tumified, there commeth Sanie in quantitie, but thin, evil ſavoured, little dolour, ſometime healeth, and oft openeth up againe, chiefly in the fæt and legges. As for the Cure, ye muſt take away the cauſe, and reduce the part to the naturall, otherwiſe it is impoſſible to heale it. If there be plentitude, cacochimie, intemperie, either of all the body, or ſome part interne, as the liver, the milt, the ſtomacke, or elſe the part ulcered about it, vice in the humors, or ſome varix, roundneſſe and hardneſſe of the Ulcer: firſt, ye muſt purge the body, as ye ſhall finde expedient, bleed if cauſe require, uſe good dyet, eate things that ingender good humors, uſing decoction of *Salſaparilla*, made thus. Take *Salſaparilla unc. 2. guiac unc. 1. di. macerentur per noctem in lib. 8. aqua puriſſima bulliat leniter, ad conſumptionem media partis, addendo in fine, ſanicula bugloſſi philoſella, pimpernella, quinq; nervi. garophilata, conſolida majoris & minoris, capillorum omnium an. m. di. glicirrhiza raſa. unc. di. fiat decoctio, capiat ſummo mane & ſudet, & aprandio unc. 4. ſive ſudore & alijs horis ſi voluerit.* This is a moſt excellent help for all Ulcers. If the fault be in the liver,

Definition.

Cauſe. *Paul. 4. ca. 46.*

Signes.

Cure. *Gal. 4. meth. cap. 5.*

Gal. 4. meth. cap. 2. & 4.

liver, milt, or ſtomake, corrobozate theſe parts by advice of the learned Phiſitian; if the fault be in the part ulcered, either being tumified with varix, or other accidents, it ſhall be corrected as in ulcers ſanious, as alſo if it be renne. If the ſalt be in the humozs which occupie the ulcer, they muſt be evacuated. All ulcers which are difficile to cicatrize, muſt have the blood about them evacuated, either by ſcarrification, or bozſleaches, and waſhing it with allom water, and ſuch as ye have heard in ulcer putride. If the part about the ulcer be black, livid or redde, ſcarrifie it, and evacuate well the blood, applying a dry ſponge, with medicaments defenſives, as in ulcers ſanious. If the lippes of the ulcer be callous, hard, and livid, it muſt be conſumed with medicaments, if not that way, we cut the haroneſſe to the quick flesh, and let it bleed well to divertize the fluxion, and intercept the cauſe of the haroneſſe. Theſe things all obſerved, thou ſhalt follow out the reſt of the cure, as is ſet down in the ſimple ulcer.

Hip. lib de ulcerib.

Celſus lib 5. cap. 26
Hip lib de ulceribus.
Gal 4 me ca. 2.

Chapter VII

¶ Of Ulcers with corruption of the bone.

Definiti n.

There are ſome ulcers which after they are healed and cicatrized a certaine ſpace, become tumified and ſuppure and renue the ulcer againe, which chanceth when the ulcer hath bene long in healing, maligne, fiſtulous, gangrenous and cancrenous, by the defluxion of the humoz in the proper ſubſtance of the bone, as we ſee in the virulence of the venerian ſickneſſe, or other humoz malignant, the which conſumeth the periost, rotteth the bone, if they continue ayze thereby, and conſumeth the blood, which is the proper nouriture thereof, alſo application of oyle, or things unctious on the bone which corrodeth. This corruption commeth by degrees: firſt by comming fat, through the humez

Hip. lib 6. aphor 45

Signes.

humor which is ſolved in it; next, either black or rotten, and is known by the matter that cometh from it, which is viſcous, thin, ſubtill, black, and ſtinking, alſo great ſtore of ſpongious fleſh, the corruption is alſo known by the ſight, not being white as it ought, alſo by the ſound, not equall but knottie and ſoft. For the curation, after remedies univerſall, let there be uſed a good diet, purging, and bleeding, and uſing this potion in the morning, not eating four hours afore, nor three after. *Rec hordei mundi partes 3 gentiana partes 2 centaurie minoris partem 1 coquantur in vino albo,* putting to a little gajac, this potion is good for the ſuppuration of the bones, as is learnedly written by Fogatius. The particular remedies are of three kinds, that is, rougins, cauters potentiall and actuall, before the application of the which we muſt be aſſured what quantitie of the bone is altered, then inciſe the Ulcer, diſcover that which is offended, and if the rottenneſſe be but ſuperficiall, we uſe rougin till we perceive the blood, which sheweth it not to be altered. The bone which is nere conſumed, as in the head and ſuch places as be nere the noble parts, and joints, and in the ridg of the back, we uſe alſo the rougin.

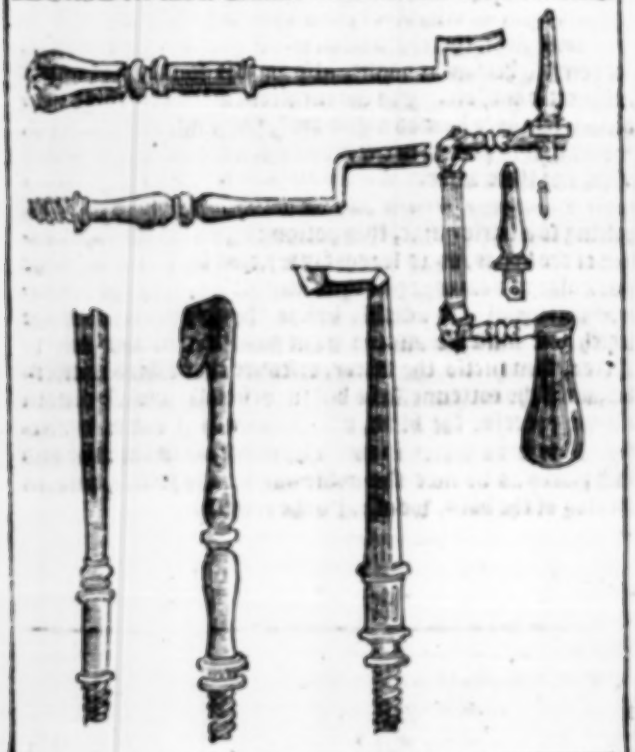
Celſus l. 8. cap. 2.

Cure.

Celſus lib. 8. cap. 2.

Celſus lib. 8. cap. 2.

Instruments to separate and take away rotten and consumed bones.



with this powder of the roots of *aristolochia, iris florentia corticis pini, thuris, aloes, floris æris, an. partes æquales,* stamp them in Aquavits and dry them in an Oven, which shall be done twice or thrice, and lay these powders on the bone, with the emplaister diacalciteos or Betonica: yet may also mixe these powders with a little honey or aureum. If these things

thinges be not ſufficient, and the alteration be greater, we uſe cauters potential, oz oyle of vitreol, oyle of cloves, mercurie, camphire, ſulphure, ſalis antimonie, incenſe, and ſuch like. But if the rottenneſſe be great, fat, and unctious, we apply Cauters actuall once oz twice, to ſeparate the whole from that which is rotten, profunding till the outmoſt of ỹ altered bone, which ye ſhal know, when there commeth no more humiditie: if you continue them longer, you conſume the humiditie naturall, which ſhould ingender fleſh betwixt the rotten and the whole bone, foz the which have gwn Judgement. This remedie hath virtue to corroborate and comfoꝛt the part, and dꝛyeth and conſumeth the evill humoꝛ, and helpeth the ſeparation of the bone, the which being perceived, ſhake it by little and little, and dꝛaw it not by foꝛce: if it be dꝛawn befoꝛe the fleſh be grown on the whole bone, the ayꝛe wil alter it. Of this remedie commeth no dolour, if yꝛ touch nothing but the bone, after the Cauters are applyed, we uſe oyle of Roſes, with whites of egges foꝛ the firſt two dayes, then mix whites of egges and freſh Butter and Honey, thereafter ſoune mundificatiue till the bone be exfoliated; then uſe the powder abobe written mixed with honey to incarnate and cicatrize, thereafter conſolid the Ulcer; in place of the bone which is loſt, there ingendereth a hard ſubſtance oꝛ calloſitie, which ſerveth in ſtead of the bone. If the rottenneſſe come to the marrow, and the bone be all coꝛrupted, there is no remedie but amputation, except in the head, haunch, and rigge back, in the which we uſe remedies pallatives as yꝛ have heard.

Gui. tract 4. de ulcer.

Alſar. lib 2.

Chapter VIII.

Of the Ulcers Cancrous, and their Curation.

Having intreated heretofoꝛe of Cancer in general, here wꝛ will ſpeake of the ulcered, which as ſaith Guydo, is an ulcer round, hoꝛrible, having the lippes thicke, hard, inequall, Definition.

inequall, foyled, turned ober, cabernous evil favoured, of colour livid and obscure, accompanied with many vains full of Melancholick blood, voyding a matter virulent, sanious, worse then the venom of beasts, subtil, watry, black or red. It is so called for two causes, as saith Avicen, the one because it cleaveth so fast to the part, as Cancer to that which it taketh hold of, the other because it hath vaines about like the feete of the Cancer. The cause, commeth of the cancer unulcered, and ulcers evil cured, and by the humors Melancholick, which come from all the parts of the body, which doe putrifie and heat, so acquire a sharpnes and venenositie, and bred cancer. The Signes are these, the cancer ulcered is still red, save to the profound of the member, casting a virulent matter in great abundance, pricking dolour, and irriteth by the application of remedies, and operation manuall, so not to be touched, and therefore called, *Noli me tangere*. The Cure generall consisteth in purgation and diet, as in tumors cancerous. Guydo commandeth a potion made of capillare, *herba Roberti fenefularia, cornudi*, Treacle and Methridate are good, for they cause venome to come out in the skum. The particular is, if it be in such a place that it may not be taken away with the branches, it shall be done by incision, canterization, or corrosion, and that the blood be all well exprimed out of the vaines, thereafter canterize it with such as have power to consume the evill humor, *quoniam in extremis morbis extrema sunt adhibenda remedia*. The arsnick sublimat is excellent, for it mortifieth in one day, cancers, fistules, and other strange maladies: apply defensives and anodines: produce the fall of the scale as in the Ulcer precedent. When ye perceive that there is neither stinck nor virulencie, but good flesh, heal it as other Ulcers. If it be in any part that it may not be thus handled, or the patient will not, or that it is uncurable, we use palliative remedies, the which consist chiefly in good diet, abstaining from things contrary, using nourishing things, thereafter evacuation, generall purgations, bleeding, applis-

Paul. l. 3 cap 27.

Cause.

Signes Aetius l. 4. cap. 43

Cure.

Gui. traff. 4. de ulcerib.

Gal. 2. ad gla. cap. 10.

Hipp. 6 aph. 1

Gal. 14. meth. cap 10.

ing

ing on the part medicaments corroborative, lineaments & reſtrenants to divert the fluxion, with other proper medicines, as this: take the juice of *ſcabios & ſolani an. unc. 2. plumbi uſti loti, unguenti pomphol. an unc. di. unguenti albi unc. 2. diacalcites unc. di. oleum camphacinum parum agitentur in mortario plumbeo.* There are divers other medicaments for this effect, as *ſuccus ſolani ſpuma argenti, ceruſa, olei an. partes equales commundantur & agitentur in mortario plumbeo, donec habeant colorem plumbi.* When there is great dolour ſee the Althea in wine and honey, puting thereto a little oyle of Roſes to make a cataplaſm, alſo waſh the Ulcer with wine, wherein *Tapſus Barbatus* and *Cardunus benedictus* hath beene ſodden. There are divers unguents and liviments ſet down daye in the tumors cancrous.

CHAPTER XI.

¶ Of the Ulcer Fiſtulous.

Definition. *Gal. li. tumor. contra natu-rem. Paſi 4. ca. 49. Celſus lib. 7. cap. 4.*

FIſtula is an ulcer deep, ſtraight, round, cavernous, with great hardneſs and calloſitie, from whence proceedeth an humor virulent; *Paulus Ægineta*, ſaith it is a ſinuoſity callus not dolorous in divers parts of the bodie, chiefly after Apoſtumes not well cured and hemorrhoides which have run long, as alſo Apoſtumes hemorrhoidall. Of it there are divers ſorts.

Cauſe. The cauſes are, as in Ulcers cavernous but the humor which proceedeth from it is worſe, comming of an evil phlegmatick melancholic and adult humor, causing a bitterneſs and veneneſitie.

Signs. *Guliel de ſali. ceto. Actius lib 6. Gal lib contra. naturam.* The ſignes are known by the ſound, and by the humor that cometh out, which is virulent, ſtinking, not dolorous except it be neare the nerve. *Galen* calleth it a ſtring, becauſe it is cave within; *Paulus* compareth it to the reede, that have Cavities, as alſo *Actius*.

Judgements. The Judgements, ſome heale eaſily, ſome are long in healing, and ſome are uncurable. Fiſtules with many cavernes are difficile, as ſaith *Celſus*, thoſe that are neare to *Celſus ibid.*

any noble part as in the thorax, alſo in the bladder, matrix, and inteſtines, are all perilous and mortall, thoſe in the ribs back, joynts, are ſuſpect, and of difficill curation. Fiſtules in the fundament, which have the orifice interior, are hard to heal; all fiſtules in bodies evill diſpoſed, are of long curation. There are divers ſorts of fiſtules, for ſome are ſuperficiall, others doe penetrate, ſome overthwark, ſome right, ſome ſimple, others compoſed with one or moe ſinuoſities, ſome end in the fleſh, ſome in the bones, and ſome in the cartilages. As for the cure, we muſt firſt conſider by the Judgement and ſound, the deepneſſe and cavernoſities, if it be callous, and endeth either in tendons, cartilages, or bones, or penetrateth within, all which things conſidered, we ordain the way of life, and purge the body according to the nature of the humor, thereafter corroborate the parts intern with this potion, which hath oft been experimented by old Authors. *Rec. hordei mundi ſcroſularia an. partem unam agrimonia, centaurii, plantaginis minoris an. partes duas, ariſtolochiæ partem di. foliorum olivæ, filipendulæ an. partes duas ſcindantur omnia minutim, piſtentur, bulliant in vino albo cum parum ſacchari.* Of this decoction ye ſhall take a draught every morning 4 hours afore meat. The particular remedies conſiſt in 4 things, firſt to dilate the orifice, if it be ſtraight, which ſhall be done by tents of gentian, briony, ſponge prepared, cyclamin: if the fiſtule doth penetrate deep, tis a thread to the tent, the orifice being dilated, we come to the ſecond point to take away the calloſity, which is done either by inciſion, cauterization, or by remedies cauſticks and corroſives, or to cut it with ſhears or raſor, or with ſuch remedies, as ye have heard in Ulcers cavernous. If it be profound & in ſuch places where it may be knit, we put a needle with a ſtrong thread through it, and knit the thread every day more and more till it be conſumed as ye heard in the fiſtula of ſ fundament. If it end in the bone & it be filled, it muſt be diſcovered, and handled as ye have heard in the proper Chapter. If it end in the tendons, or membranes, it is dolourous and the mat-

Tall 6 ca 78 Arnold de villa nova Difference. Celſ li 5 ca 28.

Cure.

Tall 6 cap 77 & Hip. lib de locis in homin

ter ſanious and clammie; if on the vain or arterie, yee ſhall perceive blood. All theſe things conſidered, if the calloſitie cannot be taken away by manuall operation, apply medicaments cauſtick, as counſell our Ancients, like as *trochiſes de aphrodelis* or powder of mercury, *auripigmentum* or white ſope, or a tent covered with arſnick, or with ſtrong water, or ſteep any of them with vinegar and diſtill in the wound, that is good: where there are many cavities, for that liquor goeth through all, let it remain two daies, putting about it refrigeratives & repercuſſives, ſome cauterize them with cauter actuall. Thereafter apply on it to appeaſe the dolour, & to cauſe the ſcale to fall, oile of roſes, with whites of egs, as yee ſhall finde in the poor mans guide, till the great heat be paſt, and the ſcale fallen, and that the fiſtule voideth matter commendable, which is a ſign, that the cauſe is aboliſhed. The 3 point conſiſteth in medicaments, mundificatives, and incarnatives, as ye have heard in Ulcer cavernous. The 4 point conſiſteth in ſarcotices, or cicatriſants, as yee have heard before. If the fiſtule be incureable, penetrating to a part principall, or ſuch other as yee have heard, as alſo if in curing of it, there come a more dangerous accident, as in the fundament happeneth voluntary ejection of the matter fecall or convulſion, in ſuch wee ſhould not ſeek the perfit cure, but uſe palliatives and purgations, of the humor pituitous, and melancholick, mundificatives to mundifie the evill fleſh and matter in the wound, thereafter deſiccatives, as *diachilon iriatum, deſiccativum rubeum, diapalma*, and ſuch like, which is the generall cure of fiſtules. As concerning the cure of fiſtules as in the fundament, which is done by manuall operations, you have heard in the 46. Chapter of particular Tumors.

Cauſtick to conſume the calloſitie.

CHAP.

Chapter X.

¶ Of burning by fire, hot-oyle, water, and other liquors.

Because often times by burning and violent heats, happen divers times great inflamations, Ulcers dolorous, with many evill symptoms, and oftentimes of difficil curation, for the which I will shew the way to Cure such ulcers in divers parts of our body. Such as are superficiall are subject to inflamation, such as be profound to excoriation and exulceration: the meaner sort have only little blisters on the skinne, in all which is dolour, redness, ardure, and such like, all evident and apparant to the sight: the Cure is, if the combustion be great in ordering the way of life tending to tenuitie, next in usage of universall remedies according to the humors which reigne, the topicall remedies are divers according to the diversity of the accidents. *Aristotle* counselleth in Burnings done by great heate, to hold the burnt place to the fire, by the which meanes the one heate draweth out the other, for this purpose whites of Egs, oyle of Roses, Rose-water is good to be used: those pustules which are superficiall, accompanied with inflamation and dolour, must be cured with things that refresh, as whites of egs, water, vinegar, Houseleke, Lettice, Hazell, Plantine, Henbane, *solanum*, Roses, or the waters of those things, and apply to the place with a cloth wet therein, in like manner Allom, cerusse dissolved in Camphire water is good: these things have the vertue to pacifie the pain and inflamation, and heal small burnings: ye may also for this purpose take the blades of Leekes, or Onions pilled, well beaten with salt, or Lettice with salt and apply to the burnt part, which hath a marveilous vertue in healing: the roots of Lillies, fried in oile of Roses, or the leaves sodden are also good: for this purpose some doe use to apply the inner part of a rotten Apple in form of a cataplasm which is also good,

Cure of Burning by fire.

Topicall remedies.

Superficiall burning.

Medicaments for burning.

if

if the blisters be very great open them, if there be ulceration use remedies lenitives and dessecatives made of 3 ounces of nutts, ware one ounce and a halfe, mix them together and wash them in Plantine water, and lay on it also sodden Lekes in wine, or the juice of them with *unguent rosat.* is good: if the sore need mundifying take turpentine well washed in decoction of barley, a little syrope of Roses, with Aloes, and barley-meale, the sore being mundified cicatrize it with *unguent pupuleon, diapompholigos, album, rasis de minio* or *diatutthiæos*, mixed in red wine or dissolved, wet a cloth therein and lay upon the sore. The foresaid remedies must be softly applyed and seldome handled, oft handling doth irritate and cause flurion, for the which I have set down a remedie in 6 Chapter of burning by Gunpowder, which doth cure al kinds of burning in short time with ons plaister only. This remedie following is very easie to be had, and doth heal without any mark, which is thus: Take the bark of the Elme tree, steep it one night in water and take it out the next morning, then you shall perceive a glutinous matter on the inner side of it, which you shall take off, and annoynt the sore therewith, with a Goose quill, this healeth perfectly in short space; and so I end this Book of Ulcers.

For ulceration.

Mundificative for burning.

(*.*)

THE

The eighth Book:

Of Bones, and certaine Diſeaſes incident to them.

Which containeth V Chapters, whoſe Contents bee theſe; By PETER LOVVE *Scottiſh man.*

Chap. 1. Of the number of bones in Mans body.
2. Of Fractions in generall.
3. Of the Curation of Fractures.
4. Of diſlocation in generall.
5. Of the embalming of a dead corpſe.

CHAPTER I.

¶ Of the number of bones in Mans body.

Interloquutors. *Peter* and *John.*

P. HAving heretofore briefly ſet down ſuch ſort of Maladies which happen commonly in the ſoft parts; ſo now we will follow out to intreat of thoſe which happen in the hard and ſolid parts, as the bones; but for the better inſtruction of thee and all young Chyrurgions, before I enter in Fractures, it ſhall be expedient to ſpeak ſomwhat briefly of the number of the bones in Mans bodie: Then, what are the number of them reckoned by the moſt part of Anatomiſts?

Joh. **In that there is diverſitie of opinions; ſom of them reckoning 246 in number, as are comprehended under theſe verſes, by the learned Vedeciner** *Gualterus Riff.*

Addes quater denis bis centum ſenáq; habebis,
Quem ſcis multiplici conditum eſſe ſemel:

Partraitura

Portraiture of the bones.



other late Anatomists have observed and found in their dis-
258 Bones in Mans bodie. section 258 bones, besides these little ones, that are in the fingers and toes, called *Sesmoida*, whose number are uncertain.

Pet. After what form are those bones divided?

Joh. In dividing of them I shall beginn at the head, as the most noble and principall part of the whole body, and is
66 Bones in the head. compo'ed of 66 bones, viz. 14 in the *cranium* which is thus divided: the first is called *coronall* or *os frontis*: the 2 is called *occiput* and is most thick, and solide, how be it in young ones it may be divided in many parts: the third is called *Spenoid* or *Basilar*, which is the fundation of the rest, the 4 is called *ethmoid* scituate above the nose, under the frontall, it is spongious: the 5 and 6 are the two bregmar, dexter and sinister, called *parietaria*. they are of figure *triangular*, and very weak. The seventh and eight are the two called *petrosa*, or *lapidosa*, which be nèer unto the eares, sit in the
6 In the eares. eares, whereof there is three in each one, called *Jucus slapes* and *malens*. In the face are 52 thus divided, the upper chaft or jaw, is composed of 18 bones, whereof the first two
6 In the eyes. are called *zigoma*, and *ingula* in Latine, or *os paris*, 6 in the eies, to wit, three in each orbit beside the great cavitie of the eye, in the which the most part of the teeth are implanted, 2 in the cannell of the nose, which are hollow and spongious, through the which the excrements of the brains doe descend, 2 of the nose, one in each side, 2 of the roof or upper part of the mouth called *sphenoides* or *os cunei* and *basilare*, and one at the root of the tongue called *Hyoides*, which by *Andreas de Lorain* and other curious Anatomists, is divided in six bones, it maketh the tongue to be more sure and firm: With two little ones in the upper jawes *ethmoides*, called *colatoria*, which is spongious and compleats the number of 18. The nether jaw or chaft which is in young Children, is divided in two, with the number of thirty two teeth, which are thus divided, the first eight which be before are called *Incisores* which is to cut that which we eate, the next four are sharp

pointed

poynted ordained to break our meate, and are called *canini*, they be nære the nerves that passe by the eyes, and in pulling out of them doe oftentimes indanger the eye, for the which they are called by the vulgar people the eye tæth, they doe grieve young ones in their bræding, then followeth two which are most great and broad, ordained to bruise & grind that meat which wee have taken, for the which they are called molares and doth compleat the 6c bones of the head.

Eye-teeth doe grieve young Children.

Per. Seeing you have verie particularly described the bones of the head, I would in like manner that you should describe unto me the number of the bones in the thorax?

Joh. The part which by the Anatomists is called thorax or coffer contained from the first verteber of the neck unto *os Coxæ*, and is composed of 66. bones, and are thus divided in the 7 vertebres of the neck, 12 in the back, 6 in the lungs, 6 in the *os sacrum*, 4 in the *os Coxæ* which maketh 34 with 24 ribbes, divided in 14 true ribbes, called *costa veræ*, which are tyed in the sternon or breast bone, and ten called *Nothæ*, which are lowest and tyed to no part. The stern or breast bone, which is composed of three, and by some curious Anatomists, of seaven bones in young ones, it is cartilaginous more soft and spungious than the rest, in such sort that if any ulcer do happen in it, it endureth a whole age as saith Hippocrates, and 1. in the heart which is *cartilaginous*, 2. *clavicula*, and 2. of the shoulder or spalde, called *omoplatæ*.

66 Bones in the thorax.

Per. Seeing you have described those bones, wherein the three noble parts are contained, in like manner I would have of you the number of the bones of the extremities, which uphold and defend the rest of the body, and first to describe how many bones the armes and hands are composed of?

Joh. They are composed of 60 bones, besides the *sesmoide*, which are thirty in each arme and thus divided, first the great bone in the arme called *brachium*. 2 under the arms the one called *cubitus*, and the other *radius*, the hands which are the instrument of Instruments, as saith Aristotle, apt to take,

take, receive, and hold, is composed of 27 bones in each hand, viz. the Carpe called *Brachiale* has 8 hard bones, and are joined to the arme: the *Metacarpe* called *postbrachiale*, of 4 bones, and are joined to the fingers, with five fingers, whereof each one hath three bones, which maketh in number 50.

3 In each finger.

Pet. In how many bones is that part which upholdeth the body composed of?

66 Bones in the legge.

Joh. The Leggs which are Instruments motives, are composed of 66 bones, which maketh 33 in each one, and are thus divided, the heinch bone which is composed of three, the one called *Ilion*, the other *Ischion*, & the three Pubis, and the great bone in the thigh called *Femur*, with that of the knee called *Rotula*; 2 in the leg, the bigg one called *Tibia*, or great focil, the lesser called *Fibula* or little focil, with the feet which are composed of 52 bones, besides the *Sesmoida*, which is 26 in each foot, thus divided; the upper part of the foot called the *tarsus* is conjoined to the legg, it is hard and solide but without spongious, and is composed of seven bones, of the which three are nameless, but are called by some Anatomists *Calcoides*: the other four have names, whereof the one is called *Calcaneum*: the second *Astragalus*: the third *Navicular*: and the fourth *Cybeide*: the *metatarsus* is composed of 5 bones, which be hard without, and cave within, full of marrow with 14 in the toes: to wit, three in each one of four, & two in the little toe. There is found in the joints of fingers and toes, certain little hard bones, called *Sesmoida*, yet not reckoned by many of the Anatomists by reason of the uncertaintie of their number, which is sometime ten, twelve, fifteen, eighteen, the most part which I did observe ever either in reading of any number of Anatomists, that have written, as also in divers sections, which I have seen, was 15 their use is to fortifie the joints of the fingers and toes, and to preserve them from going out of their own place.

52 Bones in the foot.

CHAP.

Chapter II.

¶ Of Fractures in generall.

Pet. Like as in every generall Chapter of the former Book, I have demanded of you somewhat generally of that matter whereof I was to entreat of; the which method I am now mindfull to prosecute, and because that all bones which are offended are either vitiated, removed out of their own place, bruised, or broken; for the which I will first demand of you what is a Fracture?

Joh. It is a generall division, decision, or solution of continuitie of the bone, called in Greek *Catagma*, of the which there be seven differences, and according to their effects have divers denominations, as for example, when the bones are broken in the middest overthwart, it is called by the Greeks *Agma*, and by the Latines *Ruptura transversalis*, or *virgalis*. The second kind is done according to the length of the bone, yet not separating altogether one part from another, but only rent: such kinde of Fracture is called by the Greeks *Chidasedum*, and by the Latines *Fractura linealis*. The third kinde hath the name according to the form, or by the similitude of certain fruits, peeces of wood, stalks of Coliwort broken: such kinde of Fracture is called by the Greeks, *Canledum*, which is when the bone is not soundly broken, but lifteth in divers peeces, called by the Latines *Astales*. The fourth kinde is called by the Greeks *Raphanidum*, which is when the bone is smoothly broken like a rapharo, and is called by the Latines *Fractura raphanaria*, or *Arundinalis*. The fift kinde is when the bone is broken in divers peeces, bruised, and crushed like a Net, called by the Latines *Quassatio* and by the Greeks *Apagma*: such kind of Fracture happeneth often in Wounds done by Gun-shot. Like as the first kinde called by the Latines *Rimularis*, and by the Greeks *Alphitidon*, or *Carpedone*, which is, when the bone is subtilly broken, and of all kind of fractures those

Com in apho. 23 lib 1 de articulis, & com. 1. lib. 1. de fracturis. Paul 6 cap. 89. com. in apho 9. lib. 2 de fra. & cap. 6 de capit. actis, & cap. de mala. capit.

be moſt dangerous, and often deadly, chiefly in the ſcints and neare thereunto. The ſeaventh kinde is, when a little part of the bone is ſuperficially ſeparated like unto a little ſplech or ſciat, called by the Græks *Apotraſis* or *Acopape*, the Arabians doe call it *Alcaſia*, and the Latines *Refractio* or *Preciſio*. There be divers other differences of fractures mentioned by the Græks, yet little ſpoken of by Hippocrate or Galen; and by reaſon I finde them of ſmall importance, I will for this preſent omit them, although ſome of the learned hath made ſome mention.

Paulus Lib. 6. cap 80

Gal lib 6 meth cap 6.

Celſus lib 8 cap 7,8,9,10.

Pet. Is there no other difference mentioned by our Ancients?

Joh. I finde that Galen hath ſomewhat ſpoken of two differences of fractures, the one made overthwart, the other along the bone like a peice of cloven wood. And Celſus ſpeaketh of a third kinde which is oblique; in the which fracture the points of the bone enter into the fleſh, and doth procure great dolour.

Pet. Are all Fractures ſimples, or compoſed?

Paul ibid.

Joh. Some are ſimple, other compoſed with wounds, inflammation, gangren, ulcers, dolours, and ſuch like.

Pet. Differ they not after any other manner?

Joh. They doe differ according to the part where the fracture is, as in the head, noſe, back, legges, armes, fingers, and ſuch like.

Pet. Which be the cauſes of Fractures?

Haly Abbas. ſerm. 8.

Gal. lib. 2. de fract. et com. 9. apho.

Celſus lib. 8. cap 10.

Avic. 1. fen. 2. cap 1.

Gal en 6. meth. et com. in aphо. 6. lib 2. cap 39

Joh. Haly Abbas and Galen doe ſay, that all outward things that have force to bruiſe, breake, cut, or cleave, are ſufficient to cauſe fracture.

Pet. Which be the ſignes of Fractures?

Joh. Avicen, Raſis, and Celſus doe ſay, that by the ſight and feeling of the part with the hand, thou ſhalt eaſily perceive inequalitie: as alſo feele a noyſe or bruite in the handling of it with dolour on the part.

Pet. Which are the judgements of Fractures?

Joh. All fractures in hard and dry bones, as in old people, are

are more difficile and are longer in healing, than such as are soft and humid, as in yong people. Avicen saith, that fractures in chollericke and old people are very difficile, and in very old people be very unpossible: all fractures in the ribs joyned with inflammation and spitting of blood, are most dangerous. *Com. in apho. 42 lib. 1. de fracturis. Paul lib. 6 cap. 110. Hip. lib de fracturis. Gal lib 8 meth cap 6. & apho 63 l. 2. de fractur. Roland. lib. 3.*

Pet. Which be the fractures that are easiest to be cured, and which are most difficile and dangerous?

Joh. All fractures in the ribs which are simple, also such as be in the middest of the armes, legges, and fingers, and made overthwart, are not dangerous; but to the contrary, all fractures neere the joynts & in the heads of the bones are difficile, and the motion afterwards not good, and those which presse inward are worse than those which goe out. All fractures in the head how little so ever they be, are dangerous: all fractures where they are many broken peces, are dangerous: those with wound are difficile, because the bandage cannot be done without dolour of the wound. Celsus saith, that fractures in the thigh are evill, because the member remaineth often shorter: all those that are eminent and have much marrow, are dangerous. *Celsus lib. 8. cap 10. Cel. l. 8. c. 10. Hip. de fract. cap. Hip ibid.*

Pet. Are all fractures healed in a certaine space?

Joh. Some are longer in healing, some shorter, according to the greatnes, hardnes, and drynes: fractures in the head are healed in 25 dayes, in the thigh in 45 dayes, in the legges and armes in 40 dayes, the nose in 16 dayes, the ribbes in 20 dayes, in the jawes, the shoulder, clavicules, hands, feet, are healed in 20 dayes, in the hanch and point of the shoulder in 40 dayes, and likewise in other places, according to the nature of the bone, the age, the ayre and time of the yeare, and constitution of the body, the dyet, medicaments and government of the sick, which things duly done doe shorten the time of the cure. The defect of the aliment viscous is helped by fomenting with hot water, the oft handling and shifting it doth prolong the time, as also straight ligatours, so indeed there is no time limited, but *Hip cap 6 & 8 & li. 2 de fract. Albucif 65 cel. li. 8 cap 7. Avic tract 2. cap 9 Paul 6 ca 89*

com apho. 42. & li. 1. de frac. some are longer, some shorter time in healing, as we se by daily experience.

Chapter III

¶ Of curation of Fractures in generall.

Alex. li 3. IN the precedent Chapter ye have heard what fracture is, with the causes, signes, and Judgements; now remaineth the cure, for the which ye must consider, first if there be inflammation, to deferre the reduction till it be past, for to avoyd great accidents, then we must have a quantitie of whites of Egges, and oyle of Roses, beaten together with

Gal. 6. met. cap. 5. Theod. Lib. 2 Compresses, bands, ferules, machins, lacs, cerate, and men to helpe you, with other things necessary for the purpose: having all these in readinesse, there remaineth yet five points, the first is in extention of the member, which is done by laying it on a bence or other place proper, the sicke being

Joannes. Dru li. 1. c. 18. wel scituated, there must be two persons to hold the member fractured, the one at ♄ nether part, the other at ♄ upper part, of the which one draweth up, another down to make the extension; if the hands be not sufficient to doe this, we take

Gal. cap. 12. compar. artis. cords, or strong cloth and binde fast the member one to the upper part, another to the nether, which shall be drawne by

Hip. Lib 1. de fract. com apho. 12. & Lib. 1. de artic. & 6 met. c 52 Celsi li 8 ca 10. two men contrary, as ye have heard. For the same purpose you may use glossocomes, if great force be nedfull, beware of extention, chiefly in dry bones, for feare of dolour, feaver, and convulsion. The second intention, after the extention is made, thou shalt take the member softly with thy hands, and reduce the bones in scituation naturall, then loose the machins that the muscles may goe to their owne naturall.

Hip. aph 21. & li 1. de fract Aph 26 & l. 2. de offic. medic. et li. 1 de fractur. The third intention is to binde it wel, and to hold it in the same estate unmoving, which is done be medicaments and bandage, we apply for the first time an emplaster astringent or defensive made of Bol, fry flower, whites of Egges, and oyle of Roses, it shall be best to rub the member with cerat

Galen

Galen, oyle of Roſes, Myrtill, or maſtick, before the application of the aſtringent, ꝑ cloth muſt be wet in oricrate and the bands alſo. Thereafter binde the member, of the which our ancients uſed only two kinds, to wit, the under band which Hippocrates calleth *Hypodeſmedy*, and the upper band which he calleth *Hypodemos*. The nether band is divided into 2 or 3 the firſt is ſhort beginning right on the fracture wearing upward towards the knæ; if the fracture be in the legge, the volutions muſt be cloſe together, this kinde of bandage letteth the fluxion on the member hurt. The ſecond band which muſt be longer, ſhall begin in the ſame faſhion, making two or thræ circumvolutions on the fracture, conducing downwards, this bandage maketh expreſſion of the blood which was fallen on the fracture, let the volutions be further aſunder, being low-wæ ſhall weare upagaine, and end at the other joint. The third band ſhall begin at the nether joint, and paſſe upwards on the fracture to the other joint, and there end with the reſt: the band muſt be of clean cloth, thinne, ſoft, without ſeame or hemme, of length according to the member, and the breadth of thræ or foure fingers, reaſonable ſtrong, that they be neither too ſtraight nor too ſlack bound, the ſtraight maketh dolour and inflamation, and letteth the vital ſpirit, likewiſe the too looſe binding, holdeth ꝑ bones together, ſo there muſt be mediocritie in that matter. The band being governed in ſuch faſhion, you muſt conſider that the legs, thighs, and armes are ſmaller in the nether parts than the higher, therefore wæ muſt put double clothes to the proportion of the member, to make the ſmall parts equall with the reſt, and alſo that our ſplents that are made of Cards, Wood, or white Iron, be holden faſter by the upper band. There muſt be thræ ſplents made hollow, the firſt which is biggeſt ſhall embrace all the under part of the fracture as fundament, the other two ſhall be put on both ſides a little ſpace one from another; theſe thræ ſplents being placed on the under band doe hold them faſt, and alſo kæpeth the bone

Aph 22 & 27. *lib* 3 *de officina medici.*

Com aphe 13. & *li.* 1 *de fract Celſ li* 8 *ca* 10.

Gal. 5. *de offi. medic. & Celſ. lib. citato.*

Hip. aphor 9. & 26 *li.* 2. *de officina medic. & com aſh* 21 & *li* 1. *fractu.* & *com* 36. 1. *de fracturis.*

Aph. 41. *li.* 1. *de fracturis.*

Hip lib 1. *de fractu.*

ſtready from moving, they muſt not be put to afore the ſeaventh day, alſo they muſt be narrow at the lower end according to the member, broad and ſtrong on the place fractured, with a little Cotton or Wooll. Our ordinary practiſe is to uſe them the firſt day, if there be no inflamation; and being done, we apply the two upper bands on them, called *Epidesmos*, the firſt ſhall begin in the inner ſide of the nether joynt, and turne upward to the upper part of the member. The ſecond ſhall begin in the upper-moſt part, in the outſide, turning inwards, ſo the one ſhall goe contrary to the other in forme of S. Andrews Croſſe, as ſaith Celſus. The member bound in this faſhion and ſcituated according to the ſcituation of the vains, arteries, nerves, and muſcles, as ſaith Galen; the next we muſt take a Napkin and ſowe a little ſtraw in every end of it, ſowe it together and lay the member in the middle of it: ſome for this purpoſe doe uſe a little bor of ſir pence the length of the member, bind it with little cords or ribban, ſcituate it right, ſoft, and high, ſo continue it three dayes, if no accidents happen, renewe it again in three dayes, but if the fracture be ſimple, we remove it not before the ſeaventh day, or longer. The ſeaventh day paſt, renue it every 7 day, or 12 or 20 day if other accidents doe not happen, as ſaith Hippocrates, uſe defenſives in the ſuperiour parts, at leaſt in the beginning, alſo foment it with warme water, for that revolveth the blood, comforteth the part, and humecteth it with a pleaſant humidity. The fourth precept is in generation of calleſitie firſt they ſhall eat meat of good ſuck, to ingender good blood, yet ſomewhat ſtraight, till the 10 day be paſt abſtaine from ſtrong drink, for in that time the inflamation and fever doe paſſe, eat Veale, Mutton, and Kidde, uſe medicamentis emplaſtriches that heat moderately, alſo an emplaſter or cataplaſme of whites of Egges, fine flower, and Roſes, till the 20 or 25 day be paſt; in all the time of the cure after the 10 day be paſt, the nourifhment muſt be enlarged, becauſe the generation of fleſh cannot be done but by things of good

Apho 1 & 2 & lib 3 de officina medici

Celſus lib. 8. cap. 10. & Hip. lib 1 de fractu. 11.

Lib 6. meth. cap 5.

Apho 39. & li 1 de fractuis. & apho 4 ibidem.

Hip. apho 45 & 46 & li. 1. de fractuis.

Pa 6. 9. ca 89

good nourishment, but the Caule which is named by the Latines *Callus*, and by the Greeks *Poros sarcoides*, by the Arabians *Arefson*, may be made by it self without any help, chiefly in humid and viscous persons, as in young people and children; but those of elder age which are of a more hard and dry constitution, the union or Caule of the bone cannot be made but by the help of some glutinous substance, which doth gripe the broken bone in such sort, that being dried, hardly can it be separated in those, this Caule is ingendered of the part most viscous and grosse of the nourishment of the bone: like as every part doth draw the own proper nourishment, even so the bone doth draw the part most viscous of the aliment, for the which the nourishment ought to be such as hath the vertue to engender the Caule chiefly in old people; thou maist know when the caule is making, if in tying the first band it seem bloody not wounded, it sheweth the caule to be making, then to fortifie the same we use every three daies to wash the member with decoction of Roses, and mosse of the Oake tree, putting thereto a little *Oxicrasium* or *de althea*; if in this time it itch, as often happeneth, foment it with water and salt, and use fomentation of hot water, and emplasters of pitch to revoke and draw the aliment to breed the Caule. If the Caule be too great, we bind a cake of Lead on it or some medicament that digesteth, as counselleth Galen; all emplastick substance healeth moderately. The fift precept in correction of the accidents, for sometime there is wound with the fracture, and then it must be banded more slack, using more bands and no splents, also more straight dist. If either Phlegmon, Contusion, or Gangren, cure them as ye have heard in their proper Chapters. If they be not proportionably, it must be amended by breaking of it, which must be done afore it be hard, otherwise it breaketh in some other part: to doe the same it must be fomented the space of 15 daies with Hens, Goose, or Cocks grease, fomentations and cataplasms that have force to soften the Caule, as this; take

Lib. 6 meth. cap. 5.

Celsus lib. 7. cap. 10.

unguent *de alibea* and *agrippa*, of each *unc. ſe.* oleí *Camomel. lini*, Lillies and Laurell, *axunyia gallina, anſeris* and freſh butter, of every one *unc.* i with a little Wax, ſo being ſoftened it ſeparateth eaſily, ſometime it requireth a little force to doe it. Avicen and Guydo write in divers manners to doe this, which I counſell no man to try, for better it is to ſuffer a little deformitie of a part, than leſſe of the whole body, to wit, death, which often happeneth. As for the curation of Fractures in the head, look *Hippoc. de vulneribus capitis, & Galen 6. meth. cap. 6. & Celſus lib. 8. cap. 3. & 4. & Paulus libro ſexto, cap. 90.*

Avic. lib. Guydo Lanfr. Alb.

Chapter IIII.

¶ Of Diſlocations in generall.

Pet. Like as we have done in Fractures, ſo wee will follow out in Diſlocations: but for the better underſtanding thereof, I would know of you after how many faſhions the bones are joined together, before wee come to the definition of the diſeaſe?

Joh. All bones are joined generally two waies, to wit, by *Arthron*, that is, by Articulation, and by *Symphyſin*, that is, by naturall Union.

Pet. How many ſorts are there of Articulation?

Joh. There are two, to wit, *Diarthroſis*, that is, conjunction with movement manifeſt to the ſight, as the legs, armes, feet and hands: *Synarthroſis*, is moving more obſcure to be perceived, as the teeth, the ſutors of the head.

Pet. How many ſorts are there of manifeſt movings?

Joh. Three, to wit, *Enarthroſin*, that is, when there is a great cavitie that receiveth a long roundneſs, as the thigh with the haunch: The ſecond is *Arthrodia*, that is, when a ſuperficiall cavitie receiveth a little ſuperficiall head of a bone, as the arme and ſhoulder with the omeplat: The third is *Ginglimus*, that is, when the bones receive one another,

other, as in the connexion of the knee, and the cubitus with the arme.

Pet. How many ſorts are there of obſcure movings?

Joh. Galen ſaith, that there are three, to wit, *Sutura*, as the ſutures of the head: the ſecond is called *Gomphoſis*, that is, when the bone is inſixed in like a nayl, as the teeth in the jaw-bone: the is called *Harmonia*, as the noſe with the hand, the bones of the face which are joyned together like a lute. *Lib. de Oſſi.*

Pet. You have ſpoke ſufficiently of Articulation, now tell me of naturall Union, and how manny wayes it is done?

Joh. Two waies, either without mediation, but by ſucceſſion of time groweth together, as the nether jaw-bone, which manifeſtly is diſtinguiſhed in children, or elſe by mediation, and is done three wayes, to wit, the Cartilage, as the bone *pubis*; ſecondly by the nerve or tendon, as the Sternon, and as *Ilium* are joyned together; thirdly, by fleſh, as the teeth are faſtened. *Theod lib. 2.*

Pet. What is diſlocation?

Joh. It is an outgoing of the bone out of the naturall ſeat, which letteth the moving. *Paul. li. 6. cap 3 Bru. li. 1 c. 20.*

Pet. How manny differences are there of diſlocation?

Joh. Three, of the which the firſt is called Complete, when the bone is altogether out of the place: the ſecond is Incomplete, when the bone is not altogether, but a little out: the third is Diſtortion, Elongation or Pervertion of the ligament.

Pet. How many waies is Diſlocation complete done?

Joh. Foure waies, before, behinde, or outward, and inward, ſome up, ſome down, but not oft ſeen. *Cel. lib. 8. 19. et cap 11. Gal. com. aph. 5 lib 3 de fra. et aph 1. li 4. de articulis.*

Pet. How manny differences hath Incomplete?

Joh. It hath three, the firſt, that the ligament in the joynt and about it is relaxed as chanceth in the haunch, the ſecond when the ligament is forced by great violence, as the leg or foote in making a wrong or crooked ſtep: the third is, when by little and little the ligament relaxeth and bringeth the

the bone after it, as chanceth in the back.

Per. How many differences hath the third, which is called Diſtortion?

Joh. No difference, but only the bone is made longer from the other.

Per. What are cauſes of luxation?

Cauſe. *Joh.* Two; to wit, Extern and Intern.

Per. Which are the Extern?

Gal. de cauſis morbor. cap. 2. & artis partic. ca. 58 com. apho. 26 & lib. 1. de articulis. Cel. li 8 ca 11. com. apho. 1 lib. 11. de offic. medic & com. 55. lib. 3 de fracturis.

Joh. Falls or ſtroaks, and too violent extending of the member violently againſt the figure naturall.

Per. Which are the Intern?

Joh. Great abundance of humor pituitous, gathered in the jointure, which humecteth the ligaments, and maketh them ſoft and humide, ſo the bone goeth out, as by the extennation of the muſcles about the jointure.

Per. How know you Diſlocation?

Joh. By the extraordinary tumor of the place, by the emptineſſe of the place where the bone was, by the priva-tion of the moving, accompanied with dolour.

Per. By what judgement or ſigne know you thoſe that are eaſie, and thoſe that are difficile, and thoſe which are incurable and mortall?

Judgements. *Joh.* I judge by the kind and diverſitie of the Diſlocation and body, as for example, the knee is eaſie to goe forth and to goe in, alſo the finger, in like manner members lean, and where the nerves and ligaments have ſtore of humiditie and moiſture, the arme difficile to goe forth, and hard to put in again: and in groſſe, fatt, and tender people, thoſe with fracture and apoſthume are evill to heal; thoſe are very difficile that have the ſides broken; thoſe which have bein long out, are almoſt impoſſible to be reduced; the two uppermoſt vertebres of the neck being out, letteth the reſpiration, and ſo the partie dieth within the ſpace of three daies.

Paul lib. 6 cap. 3. Celſus lib 8. cap. 21.

Cure. *Per.* What method uſe you for the cure hereof?

Joh. The method generall for all Diſlocations hath 4 Intentions: the firſt is, to put the bone in his own proper

place

place, the extention of the member firſt made, with hands of Machine: the ſecond intention is, to continue it in the place by good medicaments and bandages, as in Fractures: the third is, to put the member in right ſcituation: the fourth, to give order to the accidents, as by good dyet, purging, and bleeding if need be, and reduce the Diſlocation before the inflamation be come, otherwiſe ſtay till it be paſt: when it is neere whole, or the accidents paſt, we ſhall uſe things to corroborate and comfort the part with certaine ſimples ſodde in wine, next, the emplaſter *Oxicroſinum*, or *ad Fracturas*. *Celſus lib 8. cap. 11. Hipp. apho 4 lib 4 de artic.*

Per. If the Diſlocation chance with Fracture, what is to be done? *Alb lib 3 c. 1. Paulus lib. 6. cap. 12, 13, 14.*

Joh. Firſt, reduce the Diſlocation, next, the Fracture if it be poſſible, ſome reduce the Fracture, next the Diſlocation, if being reduced and the Diſlocation ſimple, foment with oyle of Roſes, whites of Eggs, and cloth wet in Vinegar, with ſplints, putting it in good figure, with as little pain as may be. It muſt not be ſtirred till the 7. day, except inflamation, or ſome evill accident doe fall, at which time foment it with hot water, thereafter the aſtringent as in Fractures, keep good dyet, eat little for 4 or 6 dayes, till the inflamation be paſt. If the luxation be joyned with a wound, firſt have care of the wound with lenitive medicines, next, give order to the Diſlocation: but if the Diſlocation and fracture do both poſſeſſe one part and at one time, firſt the Diſlocation muſt be reduced, next the fracture, as is more at large ſet down by Guido and Tangat. If the Diſlocation happen by cauſes externe, as by abundance of humors which looſeth the ligaments, we muſt uſe aſtringent and drying medicines. If it be accompanyed with dolour and inflamation, it muſt be cured as I have ſaid before. If there be fever, uſe good dyet, purgations, and bleeding, in the end of the cure we corroborate the part with decoction of Roſes, and Wormwood in wine, thereafter the emplaſter *Oxicroſinum*, or *ad fracturas oſſium*, till the end of the cure. *Gal. dict. cap 1. Hip. apho 65. lib 4 de artic. Hip. lib citato. Cel. lib. 8 com in apho 23 lib 1. de artic. cap 6. & lib 3 meth. Paul 6 ca. 12. Guido. Tangatius. Celſ. lib. 8.*

CHAP.

Chapter V.

¶ Of Embalming the dead Corps.

Having in all this Worke endeavoured my selfe by all possible meanes, to cure & preserve the health of man even from his birth: so now it behoveth to shew the forme and methode how to preserve the diseased or dead body even to the grave, in such sort that the young Chyrurgion may be the better experienced in all things which concerne the humane body, as well dead, as living: and that according to that ancient use and custome which ever hath bene used by the godly in all ages, as evidently appeareth by the Scriptures, as also by prophane Histories, which make mention that there was never a Nation so barbarous, not the very Scithians but have ever had such care of the burriall and embalming of their Parents and frinds, which was marvailous. The which forme hath ever continued to this day, as well by Christians as Infidels, whereof divers examples may be alledged as well in the new as in the old Testament. I read in the 19 of Ioh. how Nicodemus brought Myrrhe and Aloes mixed together, about the waight of 100 pound, and annoynted the body of our blessed Saviour Jesus Christ, then wrapped him in Linnen cloaths, thereafter buryed him as was the order of the Jewes to bury their dead. Also I read in the 50 Chap. of the 1 Book of Moyses called Genesis, how Joseph commanded his servants who were Chyrurgians to embalme his Father for the space of fort e dayes, till he was carryed from the land of Egypt to the land of Canaan, where he was buryed in a double cave which Abraham had bought for a burriall place. Herodotus reporteth, that the custome of the Jewes was most commonly to embalme them for keeping 40 or 60 dayes. Also in the last Chap. of Genesis, that Joseph himselfe was embalmed, put in a chest and carryed to Egypt. As touching other Histories, divers Authors might be here alledged,

How to preserve the dead Corps.

Scithians.

Joh. 19. 39.

Christ embalmed.

Gen. 50. 2. Jacob embalmed.

Herodotus.

Gen 51. Joseph embalmed

ledged, but for the preſent we ſhall content us with a few. Cyrus King of Perſia, commanded that his body ſhould be well bowelled, but that no Sepulchre be made for him but the earth which produceth graſſe and flowers; nevertheleſſe Diodorus maketh mention of the coſtly erection of the tombs builded by Semiramis Quæn of moſt excellent memorie, who builded Babylon, ſubdued Æthiopia, and made warre in India, wherein was engraved theſe words; *Cyrus King of Perſia.* *Diodorus.*

What King ſhall ever have neede
of mony, wealth, or treaſure,
Let him pluck up this Tombe with ſpeed,
and take thereof at pleaſure.

Darius King of Perſia reading thoſe words, cauſed the ſaid Sepulchre to be opened, wherein he found theſe other Verſes engraven; *Darius.*

Unleſſe thou haddeſt been a King,
Covetous of money, inſatiable, and deſirous,
Thou would'ſt never have undone, broken, and violate,
The graves of them that were extinct by fate.

Antonius Sabellicus doth write, that Sertorius paſſing through Barbarie found a Sepulchre in a Cittie called Tigens, which was fourtie cubits of length, wherin was richly embalmed the body of Anthius, who was a man of marvailous ſtrength, with whom Hercules did wraſtle, he was before the incarnation of Chriſt 1588 The ſaid Sertorius commanded that the ſaid Sepulchre ſhould be more richly reedified than it was before, albeit he ſhould have diſhonoured himſelfe by violating ſo notable a monument, as Plutarch reporteth. There be divers other learned men, who have written ſundry Teſtimonies of the richly embalming of the Jewes, which are not neceſſary to be ſpoken of for the preſent; here I only intend to ſhew the young Chyrurgion briefly the forme of embalming in our time, which muſt be done after this manner. First, the dead corps muſt be layd on a Table upon a clean linnen cloth on the backe, then make your inciſion from *p* Clavicul unto the *os pubis*, *Sertorius.* *Anthius* embalmed. *Plutarch.* Forme of embalming.

then

then lift up the ſternon with the muſcles of the inferiour belly, taking forth all that is therein contained: as alſo the brains after the skull be opened by the ſawe, all thoſe muſt be preſently buried, except only the heart, which may be embalmed with the body or alone, and put in a box of Lead or otherwiſe, as ſhall be thought expedient by their friends; which done, waſh the body with Aquavite and Wine, then make deep and long ſcarrifications on the armes, back, lungs, leggs, thighs, and buttocks, chiefly in thoſe parts where the great vains and arteries be, to the end the blood may avoid the better, which otherwiſe might engender corruption, which done waſh the three venters and inciſed parts with Aquavite, ſpirit of wine, and ſtrong vinegar, wherein hath been ſodden Abſcinth, Allom, Coliocinth, Aloe, and Salt, then dry all thoſe parts diligently with a water ſponge, or otherwiſe: then you ſhall have thoſe powders in a readineſſe, which commonly are made of Roſes, Cammomill, Cumin, Melilot, Pint, Wormwood, Balm, Sage, Lavender, Roſemarie, Laurell, Marjoram, Time, Cypreſs, of each a certain quantitie, all dried and put in powder, Gentian, Iris of Florence, Calamus, Aromatick, Nutmegs, Cloves, Cinamon, Pepper, Benjamin, Aloes, and Myrrhe, of each a ſmall quantity, beat all in groſſe powder, and fill up the belly and skull therewith: as alſo whole inciſions and ſow them up cloſe again with a needle and threed, thereafter annoint the whole corps with Turpentine mixed with oile of Cammomill, or ſome Aromaticall oiles that be extracted by quinteſſence, then cover over the whole body with the foreſaid powders, thereafter wrapp it in a Sear-cloth, which ſhall be thus made, take 4 pound of Wax, Roſat 1 pound, ſheeps greaſe 1 pound, *Reſina picis 1 lib. dimid. olei Petri*, or Spice, ſo much as ſhall be requiſite, mixing therewith ſome Colophon, Maſtick, Storax, and Gumm Arabick: The cloth muſt be wet in that compoſition, and refreſhed a little, then involve the corps in it, which done, tie it faſt with ſmall cords in all parts, then cover

Embalme the heart.

Aromaticall powder.

Ointment of the bodie.

cover it with a linnen cloth, or for persons of higher dignity take layze or camerige. In all the time of this worke we use to burne in the chamber Benjamin, or other odoriferous things, others to make a pleasant savour, use a candle of Benjamin, Puske, Storax, Ladan, Charecle, Cloves skin of the Pomgranet, red of Roses, of ech a little quantity, put all in fine powder and mix with Gumme of Dragagant, whereof you shall make your candle, drie them slowly, which you shall burne in the chamber during all the time of your operation. Som common people for bowelling use a few of the most common of those herbs with unquenched Lyme, the ashes of the Stalkes of Beanes, and of the Oke tree, wash the body with vinegar and stuffe up with those powders, then involve the corps in a common Seare-cloath, tie it with small cords as the former, put it in a close chest of Lead or Timber. This is the form to preserve either the dead corps above or beneath the earth: but if any would have them to continue embalmed, for to endure 100 or 120 yeers, you shall finde a perfect way to doe the same in my Book called The poor Mans Guide.

What should be burned in the chamber

Embalming of common people.

(*.*)

THE

The ninth Book:

Of Blooding : And divers other operations of Chyrurgery.

Which containeth XXIII. Chapters, whoſe Contents bee theſe; By PETER LOVVE *Scottiſh man.*

CHAP. 1. Of blooding, and ſuch things as ſhould be obſerved therein.
2. Of ſuch Rules as ſhould be obſerved in blooding.
3. Of the 17 vains of the head, the way to open them, and their effects.
4. Of the ſciuation of the 3 vains in the arme, the way to open them, and their effects.
5. Of the 3 vains in the hands, their ſciuation, way to open them, and their effects.
6. Of the 4 vains in the fundament, and their effects.
7. Of the 4 vains in the leggs, their ſciuation and effects.
8. Of things that ought to be conſidered to blood well.
9. Of things to be conſidered after the vain be opened.
10. Of Arterietomie or inciſion of the arterie.
11. Of boxing and ventoſing.
12. Of things requiſite before the applying of ventoſies.
13. Of the way of applying ventoſies.
14 Of blood-ſuckers or horſleaches, and their effects.
15. Of the Seton, the qualities thereof, and way to apply it.
16 Of the actuall and Potentiall Cauters, and their compoſition.
17 Of Cauter potentiall, and their compoſition.
18. Of the Caution in applying the Cauters.
19 Of the way to apply Cauters.
20. Of Baths, and their effects
21. Of certain cautions before bathing.
22. Of things to be obſerved before the entrie to the Bath.
23. Of Frictions, and the effects thereof.

CHAP.

Chapter I.

¶ Of Blooding, and the things therein to be obſerved.

Blooding, which the Greeks call *Phlebotomia*, and the Latines *Vena ſectio*, is an inciſion of the vain artificially done, either to retain, divert, or evacuate blood, and other humors contained within the body; for the which Avicen doth term it *univerſalem evacuationem*, and that for divers reaſons: firſt, becauſe it doth take away abundance of humors which often are contained in the vains above meaſure; next, it doth evacuate both good and evill humors, which are contained with the blood through the whole body above, and is a thing moſt neceſſary to be known by all Chyrurgions, not only for the healing of maladies, but alſo for the conſervation of our bodies from ſickneſſe, and ſometime both for healing and preſerving; for the which it is moſt neceſſary that the Chyrurgion ſhould know the number of the vains and their true ſcituation, to the end he take not one for another: for ſometimes the ſcituation is variable, and in parts not accuſtomed, very difficile to be opened. The Chyrurgion muſt alſo know the way to open them, with ſuch things as ſhould be obſerved before and after blooding, with the effects following thereupon, which be divers, reckoned by the learned; of the which Saturne maketh ſome mention in theſe Verſes.

Gal. aſſo. 2. com. 17.

Avicen.

Johan. Baptiſt. Suſ. de ſang. miſſendi rati.

Hip. com. in aſſo. 25 ca. 47.

Exhilaret triſtes, iratos placet, amantes,
Ne ſint amantes. Phlebotomia facit.

which is to ſay, It maketh glad the penſive, and mittigates

the wrathfull, it impedeth luſt, and ſuch as are ſick from being madd, eſpecially by letting blood of the Cephalick vain. There be divers particular commodies which doe proceed of bleeding ſaith Galen, and divers other learned Writers: firſt, it quickeneth the ſpirit, and purgeth the brains, helpeth the memory, and maketh the ſenſes more ſubtill clarifieth and ſharpeneth the ſight, voice, and wit, heateth the marrow, and waſteth ſuch ſuperfluous humors which make the marrow in the bone to be cold, it purifieth the whole ſenſes, and removeth thoſe fumes which aſcend to the head and trouble the ſenſes: it ſtaieth vomiting, and laxe, as ſaith Avicen, for it drawеth the humor from the center, to the circumference; it profiteth much againſt immoderate waking, for it taketh away humors, from the which divers ſharp vapors aſcend to the head and ſtayeth ſleep: it removeth heavineſſe, dulneſſe, and ſluggiſhneſſe of the body, helpeth difficulty of hearing, by taking away ſuch humors as doe provoke thick vaporous ſpirits and ſend to the head and paſſages of the eares the ſame: it refreſheth the pores and ſtrength of the body, helpeth digeſtion, evacuateth evill blood, and is a naturall evacuation of all the whol humors of our body, by the which infinite maladies are cured, thoſe be the commodities for the moſt part which doe enſue of bleeding, and are ſet down by Saxonia in theſe verſes;

Avic. 4 prim. cap. 4

Johannes Baptiſta.

Suſ. lib de ſang. miſſio. Hip. apho. 22 Gualter Riff.

Heliogabalus. ſerm. 9. par. 2

Lumina clarificat, ſerenat Phlebetomia,
Menies & cerebrum, callidas facit eſſe medullas,
Viſcera purgabit, ſtomachum, ventremq; coercet,
Pectoris & ſenſus, & ſeminium, tedia tollit,
Auditum, vocem, vires producit & auget.

Seeing the commodities of this remedy is ſo worthy and neceſſary for mans health, how juſtly may wee blame thoſe malicious ignorants that condemne the ſame, contrary to the opinion of the moſt learned, and againſt all reaſon and experience: Now it followeth to know the number of the vaines which ordinarily are opened by the learned, for curing

ring maladies, which be 41 in number, viz. 17 in the head, 6 in the armes, which is three in each one, 6 in the hands, 4 in the fundament, which is two in each ſide; 8 in the legs, the which vaines muſt be opened diverſly, the great ones are opened long wayes, the little ones overthwart; that which is in ỹ tip of the noſe, is opened by pricking of it, not lifting the skinne. As touching the particular opening of every vain, and the commodities following thereupon, you ſhall heare in the Chapter following particularly.

Chapter II.

¶ Of ſuch Rules as ſhould be obſerved in bleeding.

Sometime the blood is uſed for the preſervation of the body from ſickneſſe, as you have heard, yet not commonly uſed in children afore 14 years of age, except in great neceſſitie, neither in old people after 80 years, becauſe the abundance of blood at that time is not great, nor the forces ſtrong: but for the healing of diſeaſes which is the ſecond commoditie of bleeding, we doe let blood both yong and old people, and ſometimes rather the old than the yong, for ſometime one of 60 will better endure bleeding than one of 20 and a child of two years old ſometime will endure bleeding twice in one day, and one of thirty, three or foure times in a day, as I ſometime remarke it. Secondly, we muſt weigh the ſtrength of the ſick, for in ſtrong people we let blood largly, thoſe that are weake and extenuate, not ſo much, although Galen, Celſus, and others, counſell in vehement dolours and carbuncles, to draw blood, *uſq; ad animæ defectionem* of the which often come great accidents: ſo not to be uſed ſo largly: if the blood be evill and corrupt, you muſt take adviſe with the learned Phiſitian for the remedy thereof. Hermus and Galen doe counſell, if the blood be evill and corrupt to draw it by little and little, & ſo procure

Raſis.

Arcæus lib. 7. cap. 3.

Galen. Celſus. Hip li. 1 aphor. Paul. 6. ca. 40.

Hurni. praxis medica Gal lib 4 cap. 10. meth.

Trall. li 9 ca. 2

good blood by degrées in ſtead thereof, which muſt be done by good nouriſhment. If the body be of good habitude, well nouriſhed, and the vaines tumified and full of blood, you may draw more largely than of others, which are of a weaker and worſe temperance: ſuch as are trained up in hot Countries, nouriſhed with hot meates, doe better endure bleeding than thoſe in cold Countries, and they have their blood more hot, ſo are more ſubject to hot apoſtumes and fevers. The other cauſe of blooding, which is uſed for the preſervation of health, ſhould not be done in Winter nor Sommer, but in the Spring time, when many diſeaſes are cured, and muſt be done in the morning before the day grow hot, but that blooding which is uſed for the healing of ſickneſſes, may be done at all times and at all houres, according to the ſimptomes that happen to the diſeaſed; ſuch as are ordinarily accuſtomed to let blood either when the hemorrhoides or monethly courſes are retained, or to prevent great maladies, are let blood in divers parts according to the cauſe, ſometimes in the armes, otherwhiles in the legges or feet, as ſhall be found expedient. The excellent Aſtrologians are of opinion that the Starres, Planets, and Signes, have great power in mans body, and doe thinke that every humor of mans body, is governed by certaine of thoſe ſignes, as the ſanguine by Taurus, Virgo, and Capricorne, the Phlegmatick humor by Aries, and Sagittarius; the chollerick by Cancer, and Piſces; the melancholick by Libra, and Aquarius; and according to their opinion with ſome Phyſitians, as Conſtantinus Affricanus, blood muſt not be let of that part where they alledge the ſigne to be: which ſignes is nor was not obſerved of the moſt learned Phyſitians and Chyrurgions; like as Hippocrates, Galen, Oribaſius, Sardinus, Ætius, Paulus, Raſis, Avicen, Haly Abbas, and divers others, Latines, Greeks, and Arabians; for when the body is grievouſly oppreſſed with maladie and griefe, we doe not nor muſt not ſtay for the courſe of celeſtiall ſignes, either to purge or let blood, except onely in the

Gal. de ſang. miſſione.

Ianglerius. Gal. li de arthrid. de.

Hip. 7. apho. Oribaſius. Arnaldus.

Gal. de curatione. per ſanguiſſio cap. 29 6. meth. ca. 5

Conſtantinus Affricanus. Gal 4 apho 10. apho. & de curat. per ſang miſſ. ca. 10.

critick

critick or judgement day, which is called by the Latines *dies decretorii*, in the which in either ſick or hurt people happen oftentimes great mutations, or preſages of life or death which is very needfull to be remarked by all Chyrurgions. The critick day doth often happen after the beginning of the ſickneſſe, the 3, 5, 7, 9, 11, 14, 17, 21, or 28, day: in which daies, neither medicines nor blodings ſhould be miniſtred, neither any naturall nor voluntarie evacuation be ſtopt; like as flure of the belly, blod at the noſe, urine, ſweat, vomiting, flure of the hemorrhoides or moneths in women, but gently to entertain the ſame. Some there be who follow the opinion of the Ægyptians in obſerving of daies which are invented by them, and are called *dies Ægyptiaci*, who were of opinion, if any had fallen ſick or bæn hurt in ſuch daies, they ſhould hardly have eſcaped: the which appears to me to be fabulous. Nevertheleſſe, accoarding as they have written I will repeat them, and are theſe: the 1, and 7, of Jan. the 3, and 4, of Febr. the 1, and 4, of March: the 8 and 10 of Aprill: the 3 and 7 of May: the 10 and 15 of June: the 10 and 13 of July: the 3 and 2 of Auguſt: the 3 and 10 of Sept: the 3 and 10 of Oct: the 3 and 5 of Novemb: with the 7 and 10 of December. The excellent and learned Mathematicians doe ſay, that there is three certaine dayes that ſhould be obſerved by Chyrurgions not to let blod, to wit, the firſt of Auguſt, the 4 of September, the 11 of March. As likewiſe the 10 of Auguſt, the 1 of December, and 6 of Aprill, are obſerved by ſome Philoſophers to be very perilous to ſurfeit much in eating and drinking, for in them men may incurre dangerous ſickneſſes & often death. I read in an old Philoſopher Arabian, a man of divers rare obſervations, who did remarks 3 Mondayes in the yeare to be moſt unfortunate, either to let blod or beginne any notable Worke, viz. the firſt Monday of Aprill the which day Caine was born and his brother Abel ſlaine. The ſecond is the firſt Monday of Auguſt, the which day Sodome and Gomorrha were confounded:

Avic. 4 prim. cap. de Phleb.

Hip. apho. 21. Henricus Rantzovius

Gal. lib. 1. ad glaucon.

Philoſ. Arab.

Three moſt unfortunate daies.

founded: The third is the laſt Monday of December, the which day Iudas Iſcariot was borne, who betraied our Sauiour Jeſus Chriſt to the Jewes: theſe three Mondayes with the Innocents day, by diuers of the learned are reputed to be moſt unfortunate of all dayes, and ought to be eſcheiued by all men for the great miſhaps which often doe happen in them; and thus much concerning the opinion of our Ancients of dayes. So in like manner I will repeat vnto you certaine dayes which be obſerued by ſome old Writers, chiefly the curious Aſtrologians, who did alledge that there were 28 dayes in the yeare which were reuealed by the Angell to good Joſeph, which euer haue béene remarked to be very fortunate dayes, either to purge, let blood, cure woundes, vſe merchandize, ſow ſeed, plant trées, build houſes, or taking iourneyes in long or ſhort voyages, in fighting or giuing of battaile or skirmiſhing: they do alſo alledge that children who were born in any of thoſe dayes could neuer be poore, and all children who were put to the Schooles or Colledges in thoſe dayes, ſhould become great Scholliers, and thoſe who were put to any craft or trade in ſuch dayes, without doubt ſhould become a perfect artificer and rich, and ſuch as were put to trade of merchandize ſhould become moſt wealthy Merchants. The dayes be theſe, the 2 and 13 of Ianu: the 5 and 28 of Febryary: the 3, 22 and 30 of March: the 5, 22 and 29 of Aprill: the 4 and 28 of May: the 3 and 8 of Iune: the 12, 17 and 15 of July: the 12 of Auguſt; the 1, 7, 24 and 28 of Septem: the 4 and 15 of Octob: the 13 and 19 of Novemb: the 23 and 26 of December: and thus much concerning the dayes which are by the moſt curious ſort of the learned remarked to be good, and euill. But to returne to the medicineres whoſe rules are more ſure, and ſhould rather be followed: There are ſome who doe preciſely obſerue the courſe of the Moon, except for ſome reaſonable cauſe, and doe obſerue the new Moone rather than the old, which ought to be conſidered by reaſon of ſome other euacuation, for the which old women muſt be let

Herod did kill the children.

Fortunate dais reckoned by the Aſtrologians.

blood

blood in the old of the Moon, and yong women in the new, as noteth Gordonius, in theſe words.

Luna vetus veteres, juvenes nova Luna requirit,

If he whom we would let blood be coſtipat, give him a gliſter remollient, or ſome *Caſſia Manna*, or ſome other gentle purgation: yet in ſome caſes we let blood without any purging, proceeding as in Pleuriſies, inflamation of the lungs, apoplexies, ſquinnances, ſuffocations, flare of blood at the noſe, and in ſuch perſons who abound in blood, and not of evill humors: alſo in women with child, eſpecially if they grow heavie, ſlipperie, and over-charged with abondance of blood: alſo ſuch as have had great falls from high places, with ſuch as by any accident are become dumb, ſuch perſons we let blood in both the armes largely: further we muſt conſider if the meat he eateth be digeſted, and if the blood be groſſe, uſe fridions to ſubtillize it and make it run: if any great and long maladie hath proceeded, or great evacuation either of the hemorrhoides or monethly courſe, flure of the bellie, or vomiting, bathing, cold regions, or complexions in people over-old or over-young, long waking, or great uſing of women: in thoſe caſes blooding ſhould be deferred except for great occaſions, and then it muſt be moderately done; thoſe lets or impediments are ſet down by Saturne in theſe verſes.

Gal. lib. 10. de com medic. ſecund. loc. cap. 2.

Avic. 4. prim. cap 4.

Langfrancus.

Roge lib. de phlebotoma venarum.

Frigida natura, & frigens regio, dolor jugens
Balnea, poſt coitum, minor etas atq; ſenilis
Morbus prolixus, repletio, & eſtas
Si fragilu vel ſubtilis ſenſus ſtomachi ſit
Et faſtiditi tibi non ſunt Phlebotomandi.

Alſo ſuch as be let blood ſhould have his minde ſo much as can be free of all paſſions, chiefly fear which retyreth the blood to the center of the body; if he fear fainting, he muſt

eat an egg before, or a toaſt in wine and lye on his bed, beware to ſleep immediatly thereafter for divers reſpects, as ſaith Saturne in theſe Verſes.

Sanguine ſubſtracto ſex horis eſt vigilandum
Ne ſomni fumus ladat tibi ſenſile corpus
Ne nervum ladas, non ſit tibi plaga profunda
Sanguine purgatus ne carpas protinus eſcas.

After the bleeding keep diet for a day or two, eating things of light digeſtion, abſtain from Milk, all ſalt meat, cold drink, and airs, uſe moderate exerciſe.

CHAP.

Chapter III.

¶ Of the ſcituation of the 17 Vains in the head, the way to open them, and their effects

The vains which be the proper receptacles of the blood, are diverſly diſperſed through the whole body of man, carrying the ſame to every part thereof, which often be opened for letting of blood; of the which we are to ſpeak at this preſent, and firſt of thoſe in the head which commonly be opened; the firſt is called *vena frontis, preparata* or *recta*, and proceedeth of the Jugular intern, ſcituated in the middeſt of the forehead, for the opening of the which, thou muſt bind the neck with a napkin till the vain appear, doing the like in all other vains of the head, next draw the Lancet on the vain, and open it aſlope, take heed you goe not too deep for fear of the Pericran.

Vains in the head that be opened.

Alb. li. 2 ca. 95.

Portraiture

Portraiture of the Veines which Chyrurgions doe comonly open.



The



It is good for all inveterate dolours of the head, chiefly the hinder part of the head, for all diseases of the face, and inflammation of the eyes, phrensie: this kinde of blowing doth divert or turne, & plack back the blood the contrary way, and is called by the Latines *Revulsio*, and by the Greekes *Antispasis*, it hath been used by our Ancients for a soveraigne remedy, *Hip. 5 aph. 68.*

remedy, as witnesseth Avicen. and divers others of the learned, who did open the basilicke vaine of the right arme for a Pleurisie on the left side. Hippocrates and Galen doe counsell to let blood of the basilicke vaine of the same side where the pleurisie or pain is; the which opinion is much disputed among the Phisitians, who for the most part do agree to let blood the arme opposite for diverting great flures of blood. I my selfe doe ever let blood the part opposite for any paine or griefe, by the which I have ever found great helpe. The second vaine of the head is called *vena puppis*, scituate in the hinder part of the head, and is opened as the former, which is good for dolours of the head and Sarpinesse. The third is called *temporalis machoris*, or *sterilis*, and hath the origen from the jugulars, scituate on the temples, and hath many branches, it is opened for the migrom, dolours of the eares, Ophthalmie, and watering of the eyes. The fourth is called *auricular*. scituate behinde the eares, and must be opened as the others, the haire being shaven, & the part rubbed with a rough cloth till the vaine appeare: the opening of it is good for deafnesse, pain in the eares, old catarres, hemicranes, all ulcers maligne: but if they be cut wholly, they make a man to be sterile, as saith Hippocrates, which thing was practised amongst the Scithians to make men effeminate and serve them like women. The fift is called *Ocular*, and proceedeth of the Jugulars interns, scituate betwirt the eyes and the nose: in opening of the which you must not goe too deep, in case you hurt the muscle that moveth the eye, by the which oftentimes it draweth the eye aside, and sometime the wound becommeth fistulous: all the vaines of the head should be opened with Flambets, especially in such as are not skilful, for feare of not going too deep, the opening of this is good for maladies of the face, affections of the eyes, eye-lide, and scabs. The first is called *Nasal*, scituate on the tippe of the nose betwirt the cartilages: in opening of it goe deep with the Lancet, it is good for heavinesse of the head, flurions on the eyes, and all redness

Avic. 3. primi
Gal lib. de cur. per san. missionem. cap. 16. & lib. artis med. c. 59
Bartisa Suf. Lib de sang. missione.
Alb li 2 ca 95.
Alb li 2 ca 95
Hip. lib de Aer. & aqua.
Avicen. Haly Abbas. Albuc ibid.

neſſe of the face, yet not commonly uſed, neither was opened by Galen nor any of the Græks. The 7 is called *Labier*, ſcituate in the inner ſide of the lippe: the opening of it is good for corruption of the gummes, fiſſurs in the lips, Ulcers in the gummes and noſe. The 8 is called *Ranall*, under the tongue, and proceedeth of the Jugular intern, it is opened overthwart, not going deep in feare to make the tongue immoble, becauſe there the nerve motive is neare unto thoſe vains: it is good for the ſcinancy, inflammation of the Amigdals, Ulula, and other affections or apoſtumes of the mouth and throat, as alſo for ſuch as become dumbe and loſe their ſpæch any wayes. The ninth, is the Jugular, and taketh his originall from the vaine cave aſcendent: it is good for the ſcinancy, inflamation of the halſe, Suffocation, fluxion in the throat, Leproſie, melancholique maladies, maligne and corrodent Ulcers, Hemicrane, and Rhume. Remember that all the vains of the head muſt be opened as the reſt. *Avicen* is of the opinion, that the vains of the head being opened, letteth generation, becauſe of the animall ſpirits which diſſip, the which opinion is refelled by divers of the learned and daily experienced.

Albuc. lib d.

Haly Abbas.

Roge. lib de phlebotoma venarum.

CHAPTER IIII

¶ Of the ſcituation of the three Vains in the arme, the way to open them, and their effects.

The firſt of thæ vaines in the arme is called *cephalica*, *ſpatulina*, *capitalis*, or *humeralis*, as ſaith Galen which is moſt high and externe in the arme, & hath neither vaine, artery, nerve nor tendon under it, in opening of the which make a good iſſue, otherwiſe it is in danger to apoſtume, becauſe that oft there remaineth lappered blood, for ỳ thicknеſſe of the fleſh; it is good for all dolours and paine of the head, eyes, eares, throat, and Epilepſie. The ſecond is called *mediana*, *vena matricis*, *matricalis*, *mediaſtina*, *cardiaca*, or *purpurea*,

Alb. li. 2 ca 93.

Rabis, Oribe. Avicen, Haly Abbas.

purpured, it is compoſed of the baſilicke and cephalick ſcituated betwixt them, in the middeſt of the arme, under it is a nerve or tendon of the muſcle *biceps*, ſometime both, for the which we muſt be warie and take good heed in opening it, for feare of Gangren, convulſion, or dolour, it muſt be opened athwart, and is good for all diſeaſes that happen to the body, both ſuperior and inferiour. Once I ſaw in opening of this the nerve pricked, of the which, within ꝑ ſpace of foure dayes after, there came a ſoft tumor in the *Omoplat*, with a relaxation of the joynt, as alſo all the joynts of the body, for the which the deep prohounding is forbidden by Avicen and

Gal Riſſ.

Raſis. The third is called *baſilica, hepatica, vena interna, iſtcorina, regia*, or *vena axillaris*, and is ſcituated low down in the arme, accompanied with a great arteris under it, for the which you muſt have a great care and beware of Aneuriſme. Rans forbiddeth to blood in this vain, but in great

Raſis lib. 28.

neceſſitie. It is opened for the obſtructions of the liver, inflammations in all the body, as alſo parts under the head, hardneſſe of the liver, dolour of the ſtomack, pluriſie, and difficultie of breath.

Chapter V.

¶ Of the three Vains in the hands, their ſcituation, the way to open them, and their effects.

The firſt of the three vaines is called *cephalica*, or *ocularis*, and is ſcituated betweene the thumb and foremoſt finger, and is opened long wayes, becauſe it is little, and is

Gal lib. de ſan miſſi. ne.

good for dolours in the head and affections of the eyes. Galen ſaith; That the vains in the hands give not much blood, becauſe they are but little branches, and therefore were not opened by the medicimers Greeks. The ſecond is called *ſalvatella, titularis*, or *aſellaris*, and is only a branch of the *baſilicke*, it is ſcituated betwéen the middle finger called *medius*, and the third finger called *auricularis*, and is good for

Gal defecti.

the

the jaundiſe and maladies of the liver, being let blood in the right hand, and the other in the left hand called *ſplenetica*, for the affections of the milt, and divers other comunodities which enſue thereupon, as at large is ſet down by the learſchool of *Saturne* in theſe verſes,

Ex ſalvatella tibi plurima dona minuta
Splenem hepar pectus vocem præcordia purgat,
Innaturalem tollit de corde dolorem.

The third is called *funus brachii*, and is a branch of the *cephalicke*, ſcituate on the finger *medius*, opened in default of the other two. Theſe vains muſt be bathed in hot water, in opening of them, as thoſe in the feet.

Chapter VI.

¶ Of the four Vains in the Fundament, and their effects.

In each ſide of the Fundament are ſcituated two vains Hemorrhoidals and are opened for affections of the fundament, eſpecially the Hemorrhoides, and divers other melancholique maladies.

Chapter VII.

¶ Of the four Vains in the Leggs, their ſcituation, and effects.

The firſt of theſe four Vains is called *Popletica*, and cometh from the vain *Femorall* as all the reſt, it is ſcituated in the bending or ply of the ham, open it for all affections in any part contained in the inferior venter. The ſecond is called *Saphena*, ſcituated within the foot, neer or above the ancle on the inſide, opening of it, ye muſt not profound deep, becauſe the parts are nervous, and ſo mortall accidents often happen. Note that all vains in parts nervous, muſt

be

be opened longwiſe, except Sciatica which muſt be opened a little athwart, yet Galen ſaith that all vains in parts nervous muſt be opened longwiſe, and are not ſo much ſubject to evill accidents: this being opened is good for affections of the kidneys, matrix, gonorrhea maling that returnes in again, and alſo it provoketh the purgation in women. Be circumſpect in letting blood the foot, for it weakeneth more than any other, as ſaith Avicen, therefore I uſed alwaies to women a tablet cordiall, or elſe they eat ſomewhat afore. The third is called *Sciatica*, ſcituated above the ancle, and is opened athwart, as yee have heard, it is good for Sciaticks, dolours in the thighs and anckles. The fourth is called *Medium* or *renall*, and is ſcituated under the bending of the foot, and is opened for ſuch maladies, as the other. Some ſay, that above every knee about three fingers there are two great vains, which the Arabians call *Salfores*, and ſay if the ſick be let blood in them, he dieth preſently, but Galen is not of their opinion.

Gal. de curat. per ſan. miſſ.

Chapter VIII.

¶ Of things which are to be conſidered to bleed well.

FIrſt, the Chyrurgion muſt be in a light place either naturally, or with candle, alſo his own ſight ſhould bee good as ſaith Haly Abbas, and muſt have a ligator, that goeth twice about the arme, an inch broad, alſo he muſt have a round ſtaffe to hold in his hands: in like manner a little oile to rub on the vain to make it ſouple, alſo annoint the Lancet with ſallet oile, before the blood which will appeaſe the pain, he muſt have divers Lancets, of the which ſome are large, ſome round pointed, when the pain is ſuperficiall, alſo when need is to make a good iſſue and evacuation, which we uſe in putride fevers, and when the blood is thick and the ſick ſtrong: ſome muſt be long, ſharp pointed to open

Lib. 9.

Raſis.

open when the vains are deep and hidden, as also to make little issues in small superficiall vains, and when need is to make derivation as if the person spit blood, or bleed at the nose. The issue you make, must bleed long to divert it: we make þ issue little in people that are out of their wits, that the issue may be soone consolide, by reason that such people lose the bandage, and oft bleed much. The incision must be made one of 3, wayes, to wit, in length, breadth, and oblique, making alwaies an incision in middest of the vain, not cutting it altogether, which if it be, þ blood commeth not well, but alongst the arme, ꝛ the extreamitie of the vains retireth one from another. Then let him make the issue as it should be, and cause the blood to come well out, rub first the arme, if thou wouldst bleed gently, with a hot cloth or thy hand, then knit it with the ligatour a little above the elbow, let the binding be steady, so the vaine will shew it selfe the better, then the sick shall close his hand, that the vaines may shew the better, thereafter if it be the right arme þ Chyrurgion shall take it with his left hand, neere to the part where he intendeth to make the issue, holding his thumb on the vaine that it stirre not, for oftentimes it roleth and slideth from the Lancet, sometime it yeildeth being full of wind. This being done, he shall mark the place with the formost finger of the right hand, making a little marke with his naile on the vaine, then he shall take the Lancet betwixt the thumbe and the formost finger in the midest of it, and to the end that he tremble not, he shall leave the other three fingers on the arme, and leave the finger and thumb that holdeth the Lancet on the left thumb which holdeth the vain, then open the vaine softly, riding the point of it in the vain, not suddenly: if the vaine be not opened at the first time, prick suddenly againe a little above or under the first, ye may doe the same if the hole be not great enough to let out the blood in a reasonable quantitie. The vain opened in that manner, the partie shall hold the staffe in his hand, that he may rest his hand, and the blood come out the better. Having drawn

Rasis. Bartapalius.

Arius lib. 3 Haly Abbas. lib 1.

Gallen. de sanitate.

ſuch quantitie of blood as the cauſe requireth, he ſhall preſſe out that which remaineth, if there come out any fat as oft happeneth in groſſe people, thou ſhalt put it in againe, that done, put a peece of cloth the breadth of three or foure fingers double on the wound, and wet it in water, binde the arme with a band of an inch broad, that goeth 3 or 4 times about the arme, winding it about above the elbow and under, that it neither be too ſtraight, nor too ſlack. If the vaines be ſmall, blood them after meat rather than before, for then they are more full of blood, doe not eate nor drink for an houre or two after.

Gal. Arte. Aver.

Chapter IX.

¶ Of things to be conſidered after the Vaine is opened.

Averois.

Oftentimes chanceth after the Vaine is well opened, that the blood commeth well forth, and afterwards ſuddenly doth ceaſe, it happeneth through too ſtraight ligatour, ſaith Averois, or elſe for an apprehenſion, and ſometime through wrong and evill ſcituation of the arme, in theſe points ye muſt ſlack the ligatour, comfort the partie, and ſcituate the arme right, ſometime the cauſe is in the thicknelle and groſſneſſe of the blood, for the which rub the place inciſed with a little oyle. If the partie be weake, which ſhall be known by the changing his colour and the blood running alongſt the arme, in this ye ſhall looſe the ligatour, cloſe the wound, lay the ſick on his back, caſt water in his face, and vinegar to ſmell, & give him a little wine, within a while after looſe the band and let him bleed, till ye have got ſuch quantitie of blood as ſhall be requiſite, ſtirre not nor labour thy arme, but carry it in a figure triangular, ſleep not two houres after. Let the blood ſtand, to know the nature of it, for in our body there are divers ſorts very variable, according to the diverſitie of the age, the complexion, country, kind

kinde of the ſickneſſe, and parts of the body. We ſhall judge the nature and qualitie of the blood three waies, by colour, taſte, and ſubſtance. As for the colour, good naturall blood ſhould be red, ſweet as phlegme naturall, and of mean ſubſtance, when it congealeth not, it is a ſigne that ſome of the other humors are with it, when it is red, clear, and glittering, it ſignifieth aboundance of choller, when it is blackiſh, aboundance of melancholy naturall or adult which ſtoppeth it to congeale, the fatneſſe of the blood keepeth it alſo from congealing. *Ariſt. lib. 2 de partis animal. cap. 4. Gal lib de atra bile & de ſimp. med.*

Chapter X.

Of Arteriotomie or iuciſion of the Artery.

Like as for divers maladies, we let bood the vains, ſo we doe in ſome arteries. *Arteriotomia* is a detraction of blood by the diviſion of the artery, which was not much uſed ſave onely *Menodotus*, *Albucraſis*, and ſome others, but is greatly in uſe now, chiefly thoſe in the temples & behinde y eares, for great fluxion of catarres on the eyes, breaſt, and maladies of the head ingendered of a hot fluxion inveterated, and vaporous ſpirits which are contained in theſe arteries. In opening them, firſt I ſhave the haire, and rub the part with a rough warm cloth, that the artery may appeare the better: in opening the arterie of the temples, tye faſt the neck with a napkin after the ſorme as you have heard in opening the vaines, then conſider with your finger the beating of the arterie, then mark it with a drop of ink or with your nayle, then make a little inciſion in the body of the artery, as in the vaine, not cutting it altogether, draw ſuch quantitie of blood as is needfull, then ſtay it, and put one the wound an emplaſtrum of Maſtick, or halfe a Lean cloven, with a compreſſe and bandage. Some feare this kinde for that the blood is ill to ſtay, and alſo for an Aneuriſme: it is good in long dolours of the ſide, and all dolors that pro-

Calcu.

Aëtius.

Gal lib. 1. chirurg. Paul lib. 6 cap. 38.

Alb. li. 2. cap. 4

ceed from an hot pituitous ſubſtance, alſo for ſwiming, giddineſſe, long deſtilation, and weeping of the eyes.

Chapter XI.

¶ Of Boxing, and Ventoſing.

Ventoſing which the Latines call *Ventoſatio*, is no other thing but application of an Inſtrument, either for the evacuation of ſome humor under the skinn, or to divert the courſe of an humor to ſome other part, and to draw away ſuch things as are hurtfull, that nature cannot chaſe forth, and alſo to draw out winde in ſome part of the body. It is called *cucurbitula*, or *pixa* and is made of braſſe, horn, glaſſe, wood, or earth, in divers formes, ſome ſhort, ſome long necked, for the moſt part wide bellied, and are called *ventoſa à ventre*, as ſaith Avicen: ſome are bigg, ſome leſſe, according to the proportion of the member, the mouth is reaſonable wide, the lipps round and thick, and are applied moſt commonly in divers parts of our body. They are ſometime applied with ſcarrification and extraction of blood, otherwiles without ſcarrification, as alſo on divers parts of our body, according to the cauſe, as to draw out ſome hurtfull humor of the body, with ſcarrification and extraction of blood. Firſt we apply them in the neck to evacuate the humor from the head, for heavineſſe of the head, fluxions on the eyes, affections of the face, and ſtinck in the mouth: ſecondly, we apply them on the middeſt of the neck behinde, for difficultie of breath and cough: thirdly, under the chinn and ſides of the neck, for dolours and ulcers of the mouth, corruption of the gumms, Pegrim, Opthalmie, and ſore teeth: fourthly on the ſhoulders for diſeaſes in the thorax, pleuriſie, ſpitting of blood, affections on the ſhoulders, of repleation, for many affections of the head and throat: fiftly, on the region of the reynes, good for apoſtumes and dolours of the reynes and liver: ſixthly, on

Gal. 18 Meth. med. cap. 4 Alb. li. 2. cap. 38.

Henricus Kantzovius.

Hip. apho & li. de oculorum morbis Magni regi ſanitat.

on the middeſt of the armes, for dolour in thoſe parts, and in ſtead of letting blood, and is uſed both in old and young: Seventhly, on the *os ſacrum*, and thereabouts, and is good for the hemorrhoides and fiſtules in the fundament: Eightly, on the middeſt and rootes of the thighes, and is good to provoke the monethly courſe, for ſtrangurie, dolours of the matrix, bladder, and kidneys. The ventoſes without ſcarrification, which we call dry ventoſing, are applyed for the moſt part in 11 places. Firſt, on the open of the head, for relaxation of Uvula, and to ſtay the rhume, as ſaith Galen. Secondly, upon the *hypocondres*, to divert the bleeding at the noſe, as ſaith Galen, when the right noſethrill bleedeth, put the Ventoſes on the region of the liver; if the left ſide on the milt, ſo in like manner on all parts that bleed, we put the Ventoſes on the part oppoſite, for the communication that the veſſels have one with another. Thirdly, on the pappes, to divert the purgations that run much, according to the ſaying of Hippocrates, *Si mulieri menſtrua ſiſtere voluerit cucurbitulam, quam maximam ſub mammis defige*, and for the ventoſitie about the liver. Fourthly, in the beginning of the nerves for Palſie. Fiftly, on the Navill for the windy collick. Sixtly, on the flanck for ventoſitie of the milt. Seventhly, on the navill or wombe, to reduce the inteſtine, or matrix fallen, ventoſities in the belly, and dolours which happen in time of purgations. Eightly, we apply them on ureters, to draw downe the ſtones and gravell to the bladder. Ninthly, on the eares and mouth of Ulcers, to draw out any thing contained therein, alſo for drawing out of poyſon. Tenthly, if any where there is matter deep, to draw it out to the ſuperfice, as in *bubones venerians*, alſo in *parotides* malign, or in any other part where need is to draw any thing to the ſuperfice. Eleventhly, on the neck for Squinancy.

Raſis lib. 9 c 8.

Hipp. 5. aph.

Bartapallia;

Guido

Avic. 3. canon.

Haly Abbas. lib. 9.

Oribaſius.

Chapter XII.

¶ Of things requisite before the applying of Ventosies.

FIrst, if the body be plethorick, it must be taken away by bleeding, otherwise the ventosing is noysome; next, if the blood or humors be thick, we use to foment the place with hot water, and rub it long with a hot cloth; thirdly, that ye never scarrifie, except the application of the dry ventosies have prevailed, because the blood must first be drawne to the place before it be evacuated: Lastly, that it be not applied in the bath, but an houre or two after, or longer.

Gal. Arisen

Chapter XIII.

¶ Of the way to apply the Ventosies.

THe Ventosies are applied with hands being fastened to the bottome with a little waxe or emplaister, to hold it that it fall not on the skinne, that being done, light them and apply them on the part. Some use two or three pecces of cloth are candles put on a peece of a Card, mony or Gold, the breadth of a crowne, being lighted, set them on the middest of the part, thereafter apply the ventosie, and being applyed a certaine space, ye shall, for to take it away, poosse the flesh under the lippe of it, to let in the ayre, and so it shall fall, which being done, make certaine scratches in the skinne with a Lancet, sometimes many, otherwhiles few: in delicate folke and children, we make few scarrifications, if the blood be thick, make the scarrifications profound, if the humor and blood be subtill, the scarrifications must be superficiall, and apply the Ventosies as before, let it remaine a reasonable time, and evacuate the blood, as ye shall find expedient, if not sufficiently at one time, ye may reiterate

Magninus.

Albucrasis. Holy Abbas.

Galen.

Paul l. 6. c. 41.

reiterate twiſe or thriſe, alwaies ſcarrifying, eſpecially when there is venenoſitie or malignitie in the place, by reaſon of the blood being thick and groſſe. That being done, it ſhall be very neceſſary and expedient to dry the place with a ſoft cloth, annoint it with oile of Roſes, butter, *cerat Galen*, or *roſat Meſues*, and ſleep an hour after. *Alb. lib. 2.*

CHAPTER XIIII.

¶ Of Horſleachs or Blood-ſuckers, and their effects.

THeſe little beaſts, which the Latins call *Sanguiſuge* or *Hirudines*, in our tongue Horſleaches, are little worms, the length of two inches or three, great, like to a Goſ-quill, well known to all Chyrurgians, ingendered in freſh water, ponds, pools; of the which there are two ſorts, the one maligne, as thoſe which are bred in rotten ſtanding water, where carrion hath been caſt, of the which come great accidents, as tumor, inflamation, ulcers, apoſthumes venomous; as we read of one *Meſalinus*, who died by putting one on his knee. Therefore we muſt abſtain from thoſe that have the head greater than the reſt of the body, and are green coloured, glittering, with blew raies on the back, the reſt of the body being black: we muſt chooſe ſuch as are found in clean water, in ponds and ſandy ground, that have their heads little and bodies ſmall, round, red bellied, the backs raied like threads of Gold, ſuch ſhall be kept a day or two in clean water, to purg them before they be applyed, as alſo to cauſe them draw the better. Some keep them ten or twelve daies, changing the water once in two or three daies, after the which manner they may be kept a whole year in glaſſes or potts of earth, changing the water once in ten daies, with a little cromes of white bread, we uſe them for the ſame purpoſe, as ſcarrifications, and in ſuch places where ventoſes cannot be applyed, as in the *Magni. regi. ſanitat.*

A ſection concerning horſleaches

Arnaldus de villa nova. Haly Abbas.

Avicen. Theodoricus.

lipps, gummes, leggs, fundament, mouth of the matrix, and ſuch parts as are emptie of fleſh, as noſe, fingers, toes, alſo about old Ulcers, and Apoſthumes of the emunctoryes and others that are venomous, rubbing the part ye put them on, till it grow red. They draw only ſuperficially the blood which is in the fleſh, and ſo are good *pro morbis ſubter cutaneis*, like as in the ſcabbe called *vitiligo*, which is a foulneſſe of the body, with ſpots of divers colours: alſo in the diſeaſe called *impetigo*, which is that which we call ordinarily the Ring-worm: alſo in great itching in any part they be thought meeter to be uſed, than ſcarrification, becauſe they draw the corrupt blood more profoundly: if they be applyed on the fundament, they make evacuation from all the members, the part where we apply them muſt be very clean, otherwiſe it will not abide, in applying of them, take them with a peece of clean cloth, or with your hand; ſoftly hold their head to the part you would have them bite, and for the more eaſie doing thereof, we put a drop of Pigeons or Chickens blood on the part, or pick the part a little to cauſe ſome blood to come out: then if you would have them to draw much, cut the ends of them with the ſheers to let the blood runn: otherwiſe, if they fall away too ſoon, you may applie freſh ones in their place, or the ſame being well ſtripped, and the blood expriment out of them betwixt your two fingers: if you would make great evacuation, you may apply two or three at the firſt, to make them fall away you ſhall put a corn of Salt or dropp of Vinegar on their heads, or a few finders, otherwiſe ſeparate them with an horſe haire: if after they fall the place bleed too much, we apply Cotton, or burnt cloth, or cloth wet in cold water, or baiſe a Beam bound and tyed to the part: ſometimes by unskilfulneſſe it happeneth the Bloud-ſuker doth draw too much, or elſe the partie is ſuffered to bleed much after they fall away, whereof evill accidents often happen; as chanced in the perſon of a worthy and notable Captain my good freend, called Captain Gonſale a Spaniard, who having ſome

Alb. l. 2 ca 37.

how to apply them

Gal lib de emundis

ven

Benivieus Rantzovius.

a story of an accident

ſome Ulcers on his legge, did cauſe to apply eight Horſeleaches thereto, by the which he loſt nær ſix pound of blood, thereafter fell in *Illeritia* and ebulition of cholerick humor, *quia ſanguis eſt frenum cholera*, thereafter he became hydropick incurable, *quia qui callidi ſunt hepate ſi in aſcitem incidant omnes fere ſunt deplorati*, ſo this Gentleman died to the great griefe of many; ſo my counſell is, that after they be taken away and made reaſonable evacuation, that you by all meanes ſtay any further flux of blood. If there be benenoſitie in the part after they fall, we foment the part with water and ſalt, ſometime a cornet or little ventoſe to draw out that which they have left, ſome doe uſe before the applying of them, to purge the body, if it be repleat with humors.

Chapter XV.

¶ Of Seton, the qualities of it, and way how it ſhould be applied.

Seton, which the Latines call *Seta*, is a little round cord, which of old was made of haire or thread and now is ordinarily made of ſmall Linnen cloth, woollen, yarn, or ſilk, and is drawn through the fleſh or skin with a ſharp nædle, in divers parts of our bodies for divers occaſions, like as for revulſion, evacuation, derivation, or interception of ſome humor, like as in the neck, betwixt the 1 and 2 vertebræ, ſometime lower down, and is good to divert and draw away fluxions from the eyes, catarhs from the head, which might fall on the ſtomach, gummes, loines, back, hanches, and other joints or parts of our body. Secondly, we apply it in the Navill, when it is ſwelled or tumified with water or other humors. Thirdly, in the codds, for water or weak humors contained in thoſe parts; as alſo for ſuch as are hydropick. Fourthly, wæ apply them in wounds which doe penetrate through one part to another, as

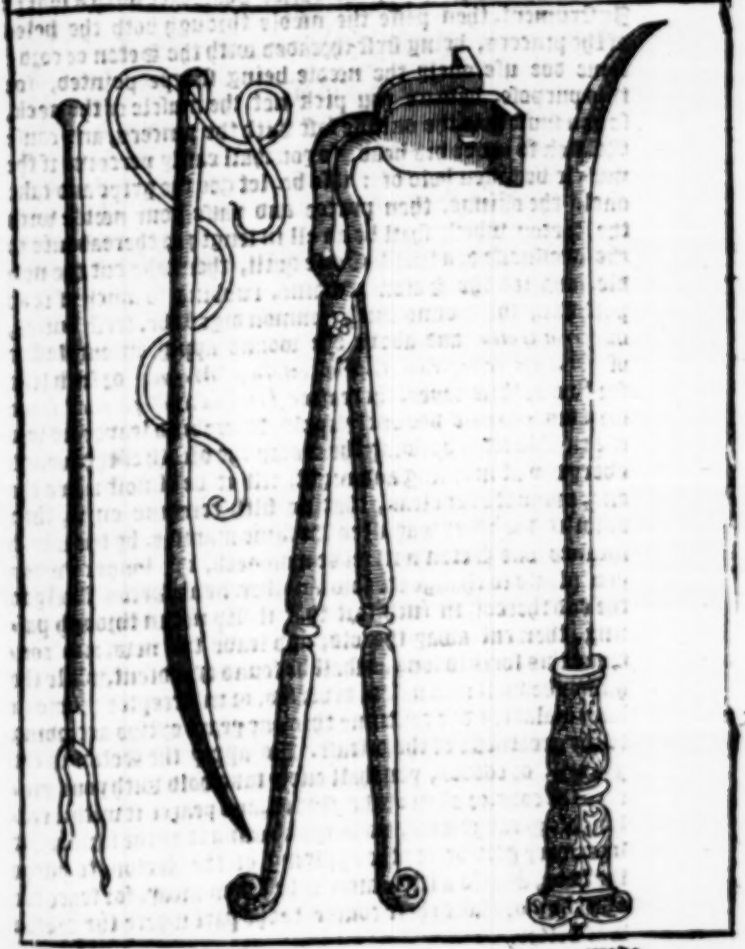
Definition.

Divers places where the Seton ſhould be applyed.

as through a legg, thigh, arme, or other part for the better evacuation of matter in those wounds, they are applyed with an hot Iron as did our Ancients, or without fire as now is commonly practised: for performing whereof, if in the neck, wee set the sick in a chair, then one taketh the neck behinde, where you would apply it equally, betwixt his hands neither more to one side than to another. I doe ordinarily marke the part with inke before, then take the skinn with the one hand nere the head, and the other lower down, leaving two inches or thereabout betwixt the hands, then the Chirurgion shall take hold of the same with his pincers.

Instruments

Instruments of Seton.



made

made for that purpose, thereafter pearce it with a sharpe Instrument, then passe the nædle through both the holes of the pincers, being first threaded with the Seton or cord: some doe use onely the nædle being sharpe pointed, for this purpose, beware you pick not the muscle of the neck, so you must hold the skinne fast with the pincers, and cause the sick to move his head, so you shall easily perceive if the muscle be taken hold of: if so be, let goe the gripe and take onely the skinne, then pearce and passe your nædle with the Seton which shall be an ell in length or thereabouts to the grossnesse of a small Goose quill, then take out the nædle, and let the Seton remaine, rubbing so much of it as possesseth the wound with common digestive, fresh butter, or *ceratum Galeni*, and above the wound apply an emplaster of *ceratum refrigerans Galeni*, *rosatum Mesues*, or such like for two or three dayes, thereafter *betonica* or *diapalma*: some for this purpose doe onely apply Woodbind leaves as we use in Tawters, drawing the Seton the bredth of the wound every day at morning and night, till it be almost nære the end, make it ever clean, that no filth remaine on it, then draw it the other way after the same manner, by the which meanes one Seton will serve a moneth, or longer: when you please to change it, sow another new Seton finely to the end thereof, in such sort that it slip not in through passing, then cut away the old, and leave the new, and continue this form so long as shall be found expedient, while the humor be well evacuated, diverted, or intercepted: some in long maladies doe continue this one yeare or two according to the greatnesse of the disease. To apply the Seton in the Navill, or coddes, you shall onely take hold with your pincers the cods, or skin of the Navill, and pearce it with a reasonable great Nædle, passing and using it as the former; it were very good before the applying of the Seton, to purge the body, as also a little after it be taken away, for feare the evill humors take their course to the part where the Seton was before.

CHAP-

CHAPTER XVI.

¶ Of Cauters actuals, their forms, and whereof they are compoſed.

THe Cauter actuall, which is called by the Latines *Cauterium actuale*, is a remedie that hath bæn thought by our Ancients very profitable for the help and recoverie of many diſeaſes: it doth burn actually the part where it is applied, and is moſt commonly made of Iron, Braſſe or Lead: ſome are made for the wealthier ſort of Gold or Silver, in divers formes, according to the diſeaſe and part where they are applied, as ye may perceive in Lib. 9. Chap. 7. and it is thought for ſome diſeaſes oftentimes to be more meet to be uſed: than the potentiall Cauter: if we conſider the nature and ſubſtance whereof the potentiall is compoſed, by reaſon that ſome ingredients thereof are venomous, and the actuall is without venenoſitie, ſo more healthfull alſo, very ſudden, and ſure in operation, not offending nor cauſing any accident to the parts adjacent where it is applyed: it is enemie to all venome and corruption, preſerveth the part where it is applyed from putrefaction, and conſumeeth mightily the maligne and venomous quality which is hid in any part of the body, it being there applyed, it correcteth the cold weak temperature, conſumeth and dryeth up all ſuperfluous humiditie, with divers other profitable helps: For the which learned Chyrurgions of old, did uſe divers formes of actuall cauterizations, as witneſſeth Galen, Hippocrates, and others who ſometime did cauterize with burning oyle, ſtampe the roote of *Ariſtolochia* therein, then light it at the fire, and applied it burning to the part. Celſus, Aurelius, Diocles and Attius, ſometime did cauterize with drye goats dung fired, Ætius with burning oyle, Albucrahs did cauterize teeth and other corrupt parts with boyled Butter, Haydo with melted Brimſtone: all thoſe formes were wont to be applyed in divers

Gal. 6 ſimp. cap. 17. Alſo li. 1. cap 2.

Celſus, Aurelius, Diocles, Attius, Ætius Lib. 1. cap 2. Haydo

divers parts of the body, for divers occasions. Like as for discharging of nature, either by revulsion, interception or evacuation of any humor, which did offend either in quantitie or qualitie, also for evacuating of a malignant and venomous vapour that is hid in any part, chiefly about Ulcers corrosives, and ambulatives, fluxions of the nose, *Ægilops*, sciatick passions, and all other parts that require evacuation, they are sometime applied on the head, at that part where the suture sagitall doth end, and the coronall begin, which I have often practised for the megrom and other dolours of the head, by which means divers grosse humors and vapors doe exhale from the brains: they be likewise applyed for the Epilepsie, to give issue to some vapour venomous at that part which often causeth the disease, they be also used for shortnesse of breath, dolours of the teth, eares, and squinances, inflamation of the ampgdals, *Columella*, and other diseases of the mouth, anheles: also for the haires which grow within the eylids, in *Polipus*, *Ozena*, some use to apply them in five sundry parts of the head, for Leprosie: but for the rare effects which follow upon it, for the present, I will overpasse them. These be the formes and utilities of those actuall cauters which was practised by our Ancients: On those parts where we apply those Cauters for Gangrens, or great flux of blood, we put on the parts adjacent a compresse wet in Oricrate, juyce of Plantine, Nozall, or whites of Egges beaten with Plantine, water, and the cauter being applyed to corrupt bones: in Ulcers we apply about the borders of the sayd Ulcers, little peices of cloth wet in either of those liquors, or a little *refrigerans Galeni*, which both doe pacifie the paine, and causeth the escharre to fall: it softneth the escharre and parts adjacent, by the humiditie. This Cauter by the heat doth excitate the naturall heat from the center to the circumference, after the applying of it, we commonly doe use a digestive made of oile of Roses, Turpentine, and yolks of Eggs; others use only oile of Eggs, and Turpentine,

Albu. loco cit.

mixed

mixed with a little powder of *Ariſtolichia*, & Beane meale. Some late practicioners (chiefly the Italians, who have bæne more curious than is needfull) have for the moſt part neglected all thoſe formes of cauterizing, alledging them to be over-vehement, fearefull to be practiſed, and not to be uſed but in great extremities, like as in ſtaying of vehement flux of blood, in great vaines and arteries, in gangrens and mortifications, carbuncles and bubons malignes, corrupt and rotten bones, they being enimies to all rottennesſe and corruption, and helpeth the ſeparation of the bones; alſo in venomous Ulcers and biting of venomous beaſts, are very profitable: as for all other occaſions that they were uſed for by our Ancients, wee now doe uſe in their place the potentiall Cauter, as you ſhall heare in this next Chapter.

CHAPTER XVII.

¶ Of the cauter Potentiall, and compoſition thereof.

THe potentiall cauter which the Latines doe call *cauterium potentiale*, or *piroticum*, is that which by the extreame heat hath the force to burne the part where it is applyed like fire, leaving an eſcharre or cruſt. It is compoſed of divers ſorts of matter which be hot in the fourth degree: of theſe, ſome be extreme hot, others not ſo hote according to their operation. Among the which are reckoned Cantharides, Vitrioll, Tartar, Arſenick, Orpiment, Sublimat, ſtrong water, oyle of Vitrioll, Cloves, Sage, or Brimſtone; as alſo of divers other things, as aſhes of the barke of Aſhe, Palme, Oake, Figge, and Vine-tree, Beane ſtalks, quick Lyme, Salnitre, Ammoniack, *Axungia vitrei*, Vine-ſtone, and gravill, all theſe or a part of them ye may ſteep in water foure or five dayes, covering them cloſe, and removing them with a peece of wood every day, morning and evening, then ſtraine it through a cloth, and keep it in glaſſes Definition.

ſes for your *lixivium* or *capitellum*: when you have to doe to make your cauters, you ſhall boyle ſuch quantitie of that lixive in a brazen pan at an hot burning fire, till ſuch time as it ſhall be congealed to ſalt or ſtone, which being taken from ỳ fire, you ſhall cut it in little peeces, to the bigneſſe of a pie or halfe a pie, and put it in cloſe glaſſes, that no aire enter therein. The forme of their compoſition which I doe uſe is this: Take the aſhes of the inward bark of Aſhe, Palme, Oake, and the Vine-tree, Bean ſtalkes, *Eſula*, quicke Lyme, gravil, *Axungia vitrei*, of each halfe a pound, Allom, and Roman Vitreol, of each 6 ounces, ſteepe all in 15 Engliſh pints of running water, which will be about 5 Scottiſh pints, mixe al in an earthen pot the ſpace of 5 or 6 dayes, removing it every day with the baton of wood as you have heard, then put forth the water and ſave the grounds, and boyle it at a verie hot fire till it grow ſomewhat thick, at which time you ſhall adde unto it two drammes of *Opium* diſſolved in Aquavite, it hath the virtue to pacifie the pain, and make the eſcharre more ſoft. Of this forme which was uſed by my M. *John Quintred* Doctor of Chyrurgerie at *Paris*, thus made, *Rec. Axungia vitrei lib. ſem. ſalis gemmæ unc. 6, ſublimati unc. ſem. cineris ſarmentorum & truncorum fabarum an. lib. ſem. aquæ lib. 10, infundantur ſpacio 5. aut 6, dierum, & fiat capitellum in fine decoctionis, adde drag. 2 epii.* Of theſe which are compoſed by M. George Baker Chyrurgion to his Majeſtie, thus made: Take the aſhes of the Oak and Vine-tree, ſtalkes of Beanes, and *Eſula*, of each a reaſonable quantitie, gravil, Vine-ſtone, *Axungia vitrei*, of each a little quantitie, ſteepe them all in water, with a little quicke Lime ſtone, whereof you ſhal make your capitall, paſſe it, and boyle it as the former.

Mr. *Jo. Quintred* his Cauters.

Mr. *William Clowſe* his Cauters.

CHAP.

Chapter XVIII.

¶ Of certaine cautions in applying of Cauters, and on what parts they ure to be put for divers diſeaſes.

THo Potentiall Cauter is applyed in divers parts of the body for divers pains and diſeaſes, for the which great care muſt be had both for the nature and temperature of the perſon, and the nature of the part where they are applyed: for in ſtrong rude people, lik as mariners, labourers, porters, Pioners and ſuch like, ſharp ſtrong Cauters may be uſed. In delicate tender people, women and children, the Cauters muſt be more weake: as alſo people who be extenuat and lean, may not endure ſtrong Cauters, becauſe their bodies are membrainous which provoketh great dolour. In applying your Cauter beware of nerves, membraines, tendons and heads of the muſcles, great vaines, and arteries. If the body be repleat, you ſhall firſt purge and let blood: they are applyed in divers parts of the body, but for moſt common in the head, armes, and legs. They uſe to be applyed in foure divers parts of the head, the haire being firſt raſed, but moſt often in the fore-head, where the ſuter ſagitall mætes with the coronall, which part is remarked by *Albucaſis* after this forme, the Chyrurgion muſt cauſe the ſick perſon to put the point of his thumb upon the top of his noſe, then extend his middle finger right line ſo farre upon his fore head, as he can judge which part ſhal be the juſt place where the cauter ſhould be applyed, and muſt penetrate to the bone, which is good for flurions on the eyes, the Pegrim, and other dolours of the head, the epilepſie, difficulty of breath. Ophthalmie, redneſs of the face pain of the teeth, eares, and Squinancy. We apply them behind and above the eares, in both ſides of the head, at the extremity of the ſuter *Lambdoid*, taking good heede of the muſcle *Cratophie*, for the more aſſurance of the which hold *Albu. lib 1 cap 2.*

on the point of your finger fast on the part where you would apply the cauter, then the sick must close & open his mouth, by which means you shall perceive where the sayd muscle endeth, by the motion of the sayd muscle. Fourthly, we apply them in the neck. There is an Italian Mediciner that vaunteth himselfe to be the first author of applying of Cauters in that part; yet I have read, that, that part was observed a long time before by Hippocrates: this Cauter should be applyed betwixt the first and second vertebre, for inveterate flurions and diseases of the eyes, for Cauters and distillations of the head, to evacuate and stoppe them from falling on the thorax, and some principall part; they are also put on the inner side of the arme, about the middest thereof, neere unto the vaines and arteries, but no wayes touching them: for assurance of the which, hold your finger on the part, cause the sick to move his arme, so shall he easily perceive if there be either vaine arterie, or nerve under it: we apply them on the leggs, within three inches to the knee, either in the out-side betwixt the two bones, or in the inside neere unto the vaine, and is good for the criticke, for interception of humor, which doe cause and entertaine Ulcers and pain in the legs and feet: They are also applyed in divers other parts of the body, to give issue out to the matter therein contained, or where there is vehement dolour or humor malignant, and fume vaporous, and in the emunctories to give issue to any vapour or humor, which must be done before the perfect suppuration thereof, as you have heard in the Chapter of Parotide.

Theo lib. 3. cap 45.

Arn. lib 2 cap 18

Hip lib de natura ossium

Chapter XIX.

¶Shewing the way to apply Cauters rightly

TO apply Cauters rightly, the Chyrurgion must justly marke the place, either with the point of his finger, or drop of ink, then make a little emplaister the breadth of a

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rij pence either of *Diapalma* or some astringent and sticking plaster, with a little hole in the midst of it, as you shall think meet for the greatnes or littlenes of the issue that yee would make, apply the plaster in such sort, that the mark of Ink appear in the midst of the hole of the said plaister, then apply your Cauter on the said hole; some doe wet this hole with a little spittle before the applying of the Cauter, so it shall work more easily, thereafter put another emplaster about it and bind it with a little thick compresse, letting it remain till such time it work the effect you require, which will be in four or five houres, if you think that the first Cauter hath not gone deep enough, apply another after the foresaid manner, which being done, take away the plaster and scarifie the escharre, and apply on it to separate the escharre or burnt part from the hole a little oyle of roses, turpentine, or butter, with a little *Iru* of Florence, or basilicon, som after the first emplaster is taken off, doe cut clean away the escharre with a bistorie. I do only scarifie: thereafter apply a medicament for four or five dayes, in which time the escharre doth commonly fall away, and the humor taketh course to that part; which done, it must bee holden open till such time as the disease be whole, for which it was made to hold it open, we use a great pie, a little ball of Gold or Silver gilt, of the bignes of a small pistol bullet, som mak those bals of Rubarb, Woodbine, Buth, or Agaric; I my self doe use certain balls which last five or six monethes, and hath the virtue to draw and hold open, and are thus made. Take wax i dram, Verdegrease, Oxymeant, and Hermodactyles, of each i unc, Sublimat and powder of Cantharides of each dim. unc. with a little rayson. I make little bals which may be kept for your usage, and use as the former, putting on the wound a woodbine leafe, with a compresse of clean linnen cloth in two doubles, tye it with a band and dresse it morning and evening, if it void much: if not, once a day: for such as travell, and may not ever get woodbins leaves, I do use Seare-cloath which lasteth five

or ſix weeks wiping it clean and uſing ſometime one ſide, ſometime another, and is thus made. *Rec. emplaſtrum triaformaci. lib. ſem, cera alba unc. 2. champhora unc. 1. litargiri, auri pulverizati unc. 2. ſpicinardi unc. 1. olei olivarum unc. 1. miſce omnia ſimul.* Melt all theſe ingredients, thereafter dip a round linnen cloth therein, then cut it in peeces, to ſerve for your uſe: as alſo it is good for cold humors, and Ulcers: Sometime we are conſtrained to continue thoſe Cauters for a long time, if ſo happen every yeare once, it were good they were removed a little, either higher, or lower, or ſide wayes; ſo the matter will avoyd the better, for oftentimes the bords of the Cauters become callous and hard, ſo empatheth the much flowing of them. If you pleaſe not to renew the Cauters, you may conſume ſuch calloſities by ſuch remedies as ye have heard in Ulcers, with calloſitie, if in thoſe Cauters or fountenels there be excreſcence of fleſh, which ſometime groweth and weareth forth the bullet, it muſt be cured by ſuch remedies as ye have heard in Ulcers, with excreſcence of fleſh: It happeneth ſometimes after the Fountenell or Cauter beginneth to runne, there commeth inflamation and dolour in and about the part: for remedy whereof you ſhall apply *Ceratum refrigerant, Galeni, Populeon, Roſatum Meſues,* or ſome Unguent, or Cataplaſme Anodyn: oftentimes when thoſe iſſues doe run much and are not often handled and dreſſed, the parts adjacent become ulcered or excoriate by the acrimonie of that humor which floweth, which cauſeth great paine; for the cure whereof, you muſt annoynt the part with *Cerat Galen,* Pomad, or red veſicative, untill ſuch time the excoriation be whole. As for theſe that make a skarre like unto the Cauter Actuall, they be of divers formes, and are applyed in ſundry parts of the body, for divers affections, as you have heard.

CHAP-

Chapter XX.

¶ Of Bathes and their Effects.

Bathing, as by the learned Herodotus is at large declared, is a washing and steeping of the whole body. for the better preservation and conservation of Mans health, and recovery of that which is lost, which was had in great use and custome amongst the Ancients, as among the Greekes: Arabians and Latines, and is also very much used and practised in all Nations in these our dayes, and is reckoned among the sorts of evacuations, a singular remedy: whereof there are two sorts, one naturall, and another artificiall. The naturall are said to bee such, as come and proceede naturally out of the ground, and are alwaies warme and hott of themselves, but yet are of divers sorts, qualities, and vertues, according to the diversitie of the places, from whence the water cometh and proceedeth, as if it come from Salt, Allom, Sulphur, Brasse, Copper, Oele, Iron, and such like. The Salt is good for pituitous, cold, and humide Maladies, Hydropsie, dolours, paines and Aches of the Belly, Stomack, Matrix and Kidneys, also it is good for all Catarres, Epilepsie, dolours of the bladder, head, stomack and eares, whites of women, and Scabbes, Generally through all the body, as is at large discoursed and set downe by Galen. The Alluminous are drying and heating, and is good for all cold and humide diseases and sicknesses, vomiting of blod, staying the hemorrhoides, the monethly course of women, aborting with childe, varices on the legges, hydropsie, maligne ulcers, rotten, waterie tumors, for all sorts of vomiting. The Sulphurous are drying in the fourth degree and heale the parts nervous, which are cold and humide, soften the hard parts, appease dolour, and comfort the stomack and splæn, they are good for the stone, strangury, for all cold and humide Maladies, Palsies, Hydropsies, Apopleries, yet they

Herodotus.

Aet. Tetr. lib. 1. de remed.

Trallian. lib. 1.

Gal. de sanita. tuenda.

must be moderately used. Those, whose minerall is iron and steele, are cold, stipticke and dry, good for hott and humide Maladies, as Gouts and dolors, of the articles, debilitie, and sofnesse of the stomacke and milt, apostbumes in the eares, monethly course, flure of urine, hemorrhoides, out-comming of the Fundament, and all ulcers in the bladder, as sayth Fuchius. The Copperis doth heale, resolve, cleanse, consolide; is good for colde and humide diseases, dolors of the Guts, maligne ulcers, and members contused; also for maladies in the mouth, inflamation in the throat and amigdalles, all sickneſſe of the eyes. Those that have their minerall Gold, are hott and dry, and good for the collick volvulus, fistulaes, Goint, maligne Ulcers, cold stomacks, the stone, rupture scabbes, leprosie, diseases of the eyes, stink in the mouth, palpitation of the heart, as saith Fuchius. The Lead being the minerall, they are good for all maligne Ulcers, Cankers, Fistulaes, divers affections of the Skin, Kidneys and Bladder, whites in women, hemorrhoides. There are some mixed with divers of these together, as in *Lorraine*, *Burgundie*, and divers parts of *Almaine* and *Italie*, of the which *Wickerus* and *Fuchius* have amply written. The artificiall bathes are artificially made, by imitation of the naturall, to supply the want thereof, as of running water and mixtion of one or more of these minerals, diversifying and appropriating them according to the disease, sometime to heate Iron and Steele red hott, and flake it in the water, and so it participateth the virtue, Sometime by mixing of Hearbs, Flowers, Rots, simply; sometime the decoction of them; also of Milk or Wine, according to the disease, as to appease dolor, to soften, to open the Conduits, to lose or binde in all these sorts. Sometime we use water called *Balneum aquæ dulcis*, of the which come great effects, so that it be always warme, it is good for all outward affections of the body, it heateth, appeaseth dolor, openeth the pores of the skinne, tempereth and evacuateth ill humors, provoketh the purgations and hemorrhoides

Lib. de morbis internis.

Lib. citato.

Gal. de sanitate tuenda lib 3 Hip ce ſec, Fuchius.

rhoides in women, diſcuſſeth and digeſteth the excrements, ſoftneth the hard parts, humecteth all the parts of the body, prouoketh ſleepe, corroborateth the ventricle, helpeth the concoction and naturall heate, good for all affections of the matrix, inflamation of the lights, for all intemperie, except the humide, dolor of the head and eyes, maladies of the lights, laſſitude of the ſtomack and backe, for all fluxions and members ulcered, for all ſcabbes and vices in the skinne of both old and young, it ſoftneth the articles, clarifieth the voice, moveth urine, bringeth the fleſh and skin in good temperature, it mundifieth and is good for hectick fevers and phrenſies, as ſayeth Hippocrates, it diſcuſſeth flatuoſities, and ſharpe excrements, the water muſt not be to hott, for it healeth and cloſeth the pores, and ſo letteth the excrements under the skinne to come forth. It muſt be done with great diſcretion, otherwiſe it will be offenſive, as you may perceive by this Epigram.

Balnea, vina, venus, corrumpunt corpora noſtra;
Reſtituunt eadem balnea, vina, venus.

Chapter XXI.

¶ Of Cautions, to be uſed in Bathing.

NOtwithſtanding the great benefit, which commeth thereof, it muſt be moderately uſed, for the exceſſive uſing hereof offendeth the heart, cauſeth ſincope, taketh away the appetite, loſeth the joynts, reſolveth the naturall heate, prouoketh neeſing, moveth humours and offendeth the Ulcers, as ſaith Galen. The bathe muſt be made in this ſort: firſt there muſt be a veſſell of the length of the party, of two foot broad, of height two and a halfe, or three, it muſt be almoſt full of water. After he hath remained a while in the bathe, fill it with warme water, cover the veſſell above with a coverlet, ſheet, or ſome ſuch like thing; having remained therein as long as is needfull, the party ſhall come

Gal. lib. de ſanit. tuend.

come forth of the bath, and dry himselfe with hot clothes, put a hott sheet about him, and cover all his body warme, put him in bed, cover him with light warme clothes, so he shall sweat very easily: after he hath sweat one hour or longer as he may endure, then take the wet sheet from him and drye him with warme napkins, chiefly the head under his armes, breast, and roots of his thighs, then let him rest in his bed an hour or two, till he be reasonably refreshed, then give him a drye cleane warme shirt, and let him keep his chamber warm all that day, some doe think it not mete to wash the head, grounding themselves only upon these verses, *Sepe manus, raroq; pedes, caput verò nunquam esse lavandum*: if the party be strong, he may bathe himselfe in like manner the afternoone, and so continue three or fyve dayes, as shall be thought expedient, entring sometime once a day, otherwhiles twice, adding to the bathe such sorts of drygs or hearbs as shall be most expedient and wholesome for the patient, and his disease: the common sort use commonly in all bathes, these hearbes following, chiefly in the Spring and Summer when they are in virture, Mallowes, Marsh-mallowes, Violets, Parietarie, Fumitarie, Fenill, *Angelica*, Dragon or Buglosse, Plantain, Patience, Agrimony, Bearsoot, Hearts tongue, Betony, Roses, which all (or some of these) may be sodden a little a fore they be put in the bathe.

Hemicus Rau. quoque.

Meo lib. de remed. foris adhibendis.

Chapter XXII.

¶ Of things to be observed before yee enter into the Bath, in, and after Bathing.

Antillus.

Hip. aphor. 51. Bru. lib. 1. de balneis.

Joban Franc. de balneorum utilitate.

FIrst as counselleth *Antillus*, a very ancient mediciner, the party should bee fasting, or else foure houres after meat, for, as sayth Hyppocrates, a man must not enter in having his belly full of meat and drink, so it is the meetest time in the morning, or foure houres after noon. Next, ye must beware that no noble part bee offended, nor much debilitated, for if the humor bee moved by the bath, the pores

and

and wayes dilated, the humor goeth easily to the part offended. The party must also before hee enter, bee purged, no weake body should enter therein. While hee is in it, hee must keepe himselfe warme, the Bath must bee meanly warm, neither too hot nor cold; for if it bee too hot, it closeth the pores of the skinn, letteth the forth-comming of the excrements, and heateth the blood. Hyppocrates counselleth to bee silent in the bath and in no wayes commoved, if hee wax feeble, he may take a little wine or a sop of bread dipped in it, or some Prunes to quench his thirst, as counselleth Cassius in his Problemes, let him drie the sweat of his face and temples and behinde the eares. He must not stay so long the first day, as the rest: Herodotus counselleth to remaine halfe an Houre at the first, afterwards an houre or two. After the comming forth, the party must bee well dryed cheifly his head, as counselleth Hyppocrates, for humidity is as great an enemy to the head, as cold, hee must have the passage open to the naturall excrements, and not eate for two houres after hee come forth of the bath.

Hippocrates.

Cassius prob.

Herodotus.

Chapter XXIII.

¶ Of Frictions, and their effects.

Of rubbing and frictions, Galen hath amply written in his bookes *de tuenda sanitate*, as also Ætius, Paulus, and Oribasius, with sundry other learned men, who have used them for divers occasions, and in divers manners, sometime with oyntments and oyles, which was in great use amongst the Romans and Greeks. Those who were old used rubbing with oyle of *irinum, camomelinum & nardinum*. Hyppocrates commendeth the same very much for sayth hee, it hath the force to bind, loose, increase flesh and diminish the same, for hard rubbing doth loose and molifie, much rubbing diminisheth the flesh, meane rubbing doth augment and increase flesh.

Galen. Paul. Ætius. Oribasius.

Hippocrates.

They

Henricus Rantzovius.

They are uſed for divers other occaſions, as yee have heard, namely, to looſe and open the pores and conduits of the skinne, to make thinne humors, and avoid all obſtructions, for the diverting of fluxion from any part of the body, and eſpecially from the head. They muſt bee done with a cloth or ſponge, firſt ſoftly and eaſily, ſometime to continue untill the fleſh ſwell and become red, and may bee done at all times, and chiefly in the morning, beginning at the lower parts, ſo to aſcend to the head, which is accounted generall rubbing. If any particular part be diſeaſed, rubb onely the place affected whereby in ſundrye diſeaſes divers effects are wrought

THE

THE TENTH BOOKE.

Of Antidotaries Chyrurgicall;

Which containeth XIV. Chapters, whose Contents be these; By PETER LOVVE *Scottish-man.*

Chap. 1. Of medicaments in generall.
2. Of medicaments Anodines.
3. Of repelling medicaments.
4. Of medicaments attractives.
5. Of medicaments resolutives.
6. Of remollient medicaments.
7. Of suppuratives.
8. Of mundificatives.
9. Of incarnatives.
10. Of Cicatrizants.
11. Of medicaments agglutinative.
12. Of medicaments Catereticks.
13. Of medicaments that stanch blood.
14. Of Oyles, Unguents, and Plaisters,

Chapter 1.

¶ Of Medicaments in generall.

IN this Book we will speake of diders sorts of medicaments commonly used by the Chyrurgions, in the which we shall first shew the definition and division of every one severally, both simples and composed, whereof they proceed and take their originall, as of plants, trees, beasts, earth, or sea. Of the parts of plants,

as

as of the Leaves, Flowers Bark, Root, Seed, Gum, Juyce or Dyles. Of Beasts, as of Vipers Serpents, Cantarides, Frogs, Cats; or of the dissimulare parts of Beasts, as the Liver, Lights, Heart, or Brains; also of the Bones, Marrow, Grease, Blood, Milk, and Flesh; likewise of the excrements, as of the Haire, Hornes, Dung, and such like. Of Minerals or earth, as Stones, Mettalls, Orpiment, Sandaracha, Sulphur, Cadmia, Litharge, Quick-silver, Argent, Calcites. Of the Sea and Waters, as all kinde of Salt, Sponges, Asphaltrum, Nitre, Amber, Bitumen, Pissaphalen, Carinum, Alcionium. The compounds may be made of these simples divers wayes, as Dyles, Unguents, Liniments, Cerates, Cataplasmes, Emplasters, distilled water, Fomentations, Vaporations, Suffumigations, Gargarismes, Bathes, and such like: but for the better understanding of this matter, we shall shew the degrees of Medicaments, and nert the measure and weight.

4. Degrees of medicaments.

There are four degrees of medicines, hot, cold, drie, and humide, and have four qualities, as, Heating, Cooling, Drying, and Humecting, but not manifestly, and is so little, as scarcely known, by the sence. The second degree is Heating, Cooling, Drying, Humecting manifestly, as is apparent to the judgement. The third degree is Heating, Cooling, Drying, and Humecting, offending the sences, but not extreamly. The fourth degree is Hot, Burning, and maketh a scarr and corrupteth the sences, as quick-Lyme, all causticks Actuall and Potentiall, Cold, which mortifieth and obtundeth the sences, as *Opium*, and all stupefactives, or drie, which burn like Cauters, actuall: humide is not so vehement, as the others, for humiditie is not of such force, except it be joyned with cold, of the which Galen hath made no mention. After this manner the Medicaments were put in degrees, before Galen, as reporteth Dioscorides.

Galen.

Dioscorides.

Medicaments temperate in Hot and Cold.

Temperate things.

The Medicaments that are temperate in Heat and Cold, are Faba, lens, hordeum, fructus & folia brusci, species capillorum

pillorum veneris, axungia ſuilla, oleum dulce, cera, lac, vitellus ovi, litargirus, adjantum, cadmia, gliſiti, cucurbita, fructus, ſolia bruſci, cortes citri, &c.

Medicaments hot in the 1 degree.

Ariſtolochia rotunda, althæa, amigdalæ dulces, *jujubæ*, caſtaneæ, ficus, braſſica, abſinthium, apium, eupatorium bugloſſa, borago, mercurialis, morſus diaboli, ſalvia, ſcolopendria, ebulus, ſpicanardi, aloe, triticum, fennigrecum, ſemen Lini, mel, butyrum, ſacharum, ſerum lactis, melilotus, vinum novum, ſenecio, ſambucus, ebulus, agaricum, oribus æqulum.

Medicaments hot in the 2 degree.

Guajacum, Cyperus, Calamus aromaticus, Peonia, Nux Indica, nux muſcata, amigdalæ amaræ, enula campana, branca urſina, conſolida major, ſanicula, dens leonis, eruca, gariophillata, lavendula, cardamomum, marrhubium, mentha domeſtica, petroſelinum, ſcabioſa, feniculum, thus, mirrha, maſtiche, ſarcocolla, bryonia, betonica, rubia tinctorum, fumeſtarie, gallitricum, geniſta, lupulus, æſiippus, meliſſa, mentha, ranunculus.

Medicaments hot in the 3 degree.

Gentiana, Ariſtolochia longa, Polipodium, Pyrethrum, raphanus, ſatyrion, acorus, gingiber, iris, apium riſus, artemiſia, cherefolium, cupreſſus, helleborus, ſcrophularia, naſturtium, origanum, ſalvia, ciclamen, dictamus, opopanax, roſmarinus, galbanum, Juniperus, aniſum, hiſſopus, abrotanum, ſalyrium, roſmarinus, ſtaphiſagria, apopinax, thapenticum, ſæniculi, oſſerum, aniſum, betonica, colocynthus, coſtus, liguſtrum, perforata, ruta, ſabina, galbanum, iris radix.

Medicaments hot in the 4 degree.

Allium, Cepa, Tithimalus, Sinapi, Euphorbium, Piper, oleum petroleum, pyrrethrum, Anacardus, ſatureia.

Medicaments cold in the 1 degree

Caſtanea, Malus, Granata dulcia, Spina alba, Gramen, hepatica, lilium, convallum, hordeum, atriplex, pira, poma, viola,

viola, roſa, cotoneum, malum, granatum.

Medicaments cold in the 3 degree.

Pomum perſicum, Cucurbita Cucumer Aſininum, Cynogloſſum, primulaveris, pulmonaria, mala granata fetida, pſillium, balauſtia, acacia, plantago, pomum perſicum, endivia, lenticula palauſtris, nymphæa.

Medicaments cold in the 3 degree.

Virga paſtoris, Acetoſa, Endivia ſilveſtris, Tormentilla, portulaca, vermicularis, ſemper vivum, ſolanum hortenſe, fragraria, ribes, camphora.

Medicaments cold in the 4 degree.

Papaver, Opium, Cicura, hioſciamus, mandragora.

Medicaments moiſt in the 1 degree.

Enula campana, Malus, Bugloſſum, Borago, Spinachiæ, amigdales, jujubæ, nux Indica, ſemen lini, butyrum, viola, piſa.

Medicaments humide in the 2 degree.

Lilium Convallum, Lenticula palauſtris, Nimphæa, Lactuca, branca urſina, cucumer aſinipus, portulaca, primulaveris, eruca, dactili, pſillium, ammoniacum, atriplex, pulmonaria, eringium, cucurbita.

Medicaments humide in the 3 degree.

Satyrium, Endivia ſilveſtris, Fragaria, Cucurbita, braſſica.

Medicaments humide in the 4 degree.

Argentum vivum.

Medicaments drie in the 1 degree.

Feniculum, radix Althæa, morſus Diaboli, Sambucus, mala granata, Ebulus, caſtanea, hordeum, fenigrecum, camomilla, mellilotum, crocus, thus, argenti ſpuma, ſarcocolla, faba, fumus terræ, tormentilla, acetoſa, mercurialis ſalix, granum Schænanthum.

Medicaments drie in the 2 degree.

Ariſtolochia, Guajacum, Cyperus, Calamus Aromaticus, Cinamomum, Anethum, Abrotanum, Cheræ folium, Conſolida major, Opium, Centaureum, virga paſtoris, Cynogloſſum,

Cynogloſſum, Sanicula, dens leonis, Hiſſopus, Geniſta, Marrhubium, Petroſelinum, Scabioſa, Pimpinella, Cardamomum, Amigdalæ amaræ, Millium, Nux Indica, Nux Muſcata, Myrrha, Orobus, Mel, Anethum, Cyperus, cupreſſus, cuſtula, endivia, fœniculum, lavendula, garriophyllata, Iupubis, muliſſa, mentha, ficus, mala granata, maſtick.

Medicaments drie in the 3 degree.

Lavendula, Cyclaminus, Acorus, Raphanus, pyretum, Gentiana, Galanga, Serpentaria minor, Abſynthium, artemeſia, Apium Riſus, betonica, chelidonium, cicuta, helleborus, ſcrophularia, lyguſtrum, naſturtium, origanum, pentaphillon, Roſmarinus, Sabina, Aniſum, nigella, Agnus caſtus, allium, cuminum, Sanguis Draconis, galla, abrotanum, perforata, pulegium, ruta, tormentilla, ſerpentaria, aceroſa, aſſarum, creta marina, acetum, alloe, Milium.

Medicaments dry in the 4 degree.

Piper, tichimalhus, anacardus, ſatureia, oleum petroſelinum, Sinapi, Euphorbium, allium, naſturtium.

¶ Of the Weights and Meaſures of Medicaments, uſed by the Chyrurgians.

Lib. Signifieth a pound, that is to ſay, 12 ounces.
Onc. Signifieth one ounce, which is, 8 drammes.
Drag. Signifieth a dramm, which is 3 ſcruples.
Scr. Signifieth a ſcruple, which is 20 grains of wheat.
Gra. Signifieth a grain of wheat.
Denarius and Drachma is all one.
M. Signifieth *Manipulus*, and is as much as one can hold in his hand.
P. Signifieth *Pugill*, which is as much as one can take betwixt the thombe and the two formoſt fingers.
Cyathus. Signifieth ſo much as one may eaſily drink at one draught.

Pet.

Yet for as much as the perfect knowledg in compounding of medicaments, which are ordinarily used by the Chyrurgions, cannot well be known without the knowledg of the quantitie of both weights and measures; so for the better instruction in that matter, I will briefly declare to you as they are ordinarily marked by the Phisitians and Chyrurgions in this our time.

Libra hath this mark ——— ℔
Semis ——— ß
Uncia ——— ℥
Quarta ——— Q
Dragma ——— ʒ
Scrupulus ——— ℈
Grana ——— G
Ana of each one a little much, marked thus ——— A
Libr. semi. ——— ℔ ß
Semuncia ——— ℥ ß ——— and so of the rest: but because there be divers sorts of diseases and sundry symptomes which happen in them, for the which I shall set down divers sorts of remedies which are used by the Chyrurgions, as well for the help of the symptome, as recoverie of ill diseases, like as Medicaments, Anodines, Repercussives, Attractives Resolatives, Emolients, Suppuratives, Sundificatives, Incarnatives, Siccatrizants, Agglutinatives, Catheresticks, Septicks, Causticks, and such as doe restraine flux of blood; of all which I will beginne at Anodines, and so prosecute the rest.

Chapter II.

¶ Of Medicaments which appease dolour called *Anodini*.

Gal. lib 2. de loch affect. Gal. 12 meth. & de palpitat.

Dolour is a grievous thing, like as pleasure is a joyful, the which is cured first by knowing the cause, next by the ablation of the same. The cause of dolour is either distemperature,

temperature or ſolution of continuitie, which is either hot, dry, or humide. The hot cauſeth vehement pain. The dry moveth pain, but not ſo vehement. The humide maketh almoſt no pain at all. The medicaments Anodin called by the Græks *Paogonta*, are thoſe that have force by their temperate heat to appeaſe the dolour, of the which ſome be Propers, ſome be Impropers. The proper Anodins are thoſe which by a contrary quality open and take away the cauſe of dolour, like as *oleum laurinum* in cold dolours, violate in hot dolours, *hydelæum* in dry dolours. The Anodins improper, are thoſe which not by themſelves, but by accident appeaſe the pain, and are called by the Græks *Narcotickes*, the which ſtupifie the feeling of the part and make it more heavie: The office of the proper Anodins is to evacuate, digeſt, rarifie, and extenuate the evill humors which be ſharp, thick, vaporours, and cold. *Gal. li. 5. ca. 12. ſimp.*

The Anodins proper, are either Simple, or Compoſed.

The ſimple, like as oleum amygdalarum dulcium, butiri, lini, ovorum, hyperici, axungia galline, anatis, anſeris, folii malve, violarei, parietarie, medulla vituli, & cerui, aqua calida, ſemen lini, camomilla, fenugrecum, melilotum, folia hyoſchiami, ol. olivarum & anethi.

The Compound Anodins.

The Compounds of theſe are oiles, unguents, liniments, and plaſters, fomentations, cataplaſmes, and ſuch like, which may be made according to the varietie of the diſeaſe.

Anodines hot.

Oleum Anetinum, Camomellinum, Amygdalarum dulcium, lumbricorum, lini, vulpinum, mellinum, triticeum, de vitellis ovorum, ſambuceum, ceræ, terebinthinæ, irinum, hyperici, laurinum, juniperinum, ſulphureum, piperum, maſticinum, roſmarinum, petrolium: Of theſe all mixt together, or ſome ware mingled with them, yee may make liniments, unguents, as oxicrocium nicolai, de althea, reſumptivum, æruginatum ſine mercurio, martiatum,

Arragon, Agrippæ cerati filii Zacatie Filagrii, Cyroneum emplaſtrum, ceratum Andromachi, fotus Aquæ Vitæ, panus calidus in ea merſus & admotus, iſta valent in ſedatis doloribus quæ procedunt a materia frigida, unguentum comitiſſæ **is proper for the matrix,** martiatum **for the nerves,** baccæ lauri **for the belly.**

Linimentum callidum.

Hot liniment. *Rec.* Oleum Amygdalarum Dulcium, Sambucinum, an. unc. 2, Ladani unc. 1, Croci drag. 1 ſe. Muſcilaginis ſeminis Altheæ, & Lini extractæ in qua Melliloti, unc. 2, Cere unc. ſe. ſeminis Anethi, unc. 1 ſe. ſucci Caulium unc. 3, Bulliant ad Succorum conſumptionem, fiat linimentum.

Aliud.

Hot cerat. *Rec.* Picis Burgundiæ, unc. 3, Theriacæ & Mithridati, an. unc. 1, pulveris ſeminis Aniſi, Dauci an. drag. 1 ſe. olei Irini & Camomillini, an. unc. 1, fiat ceratum.

Cataplaſma.

Cataplaſm. *Rec.* Florum Melliloti in ſapa coctorum, unc. 4, Ovorum vitella 4 ad Duritiem in aceto cocta, olei anethini & Camomillini, an. unc. 1 ſe. fiat cataplaſma.

Aliud.

Rec. Baccarum lauri, Juniperi pulveriſatarum an. drag. 3. coquantur in vino veteri & oleo Roſato optimo, fiat cataplaſma.

Anodina frigida.

Cold anodins. Oleum Omphacinum, Papaverum, Roſarum, Violarum, Liliorum, de Hyoſciamo, unguentum Populeum, de Lytargiro refrigerans, Galeni, Santellinum, Muccilago Pſilii, Cydoniorum, Opium, cum Croco, emplaſtrum de Mineralibus, unguentum deſiccativum Rubeum.

Compounds.

Cold compound liniments. *Rec.* Ceræ albæ unc. 5, Olei Camomillæ, & Roſarum an. unc. 2, Ovorum lutea 8, ſucci Coriandri & Papaveris albi an. unc. 2, Croci & Opii an. ſcr. 2, miſce cum Oxycrato, fiat linimentum.

Aliud.

Aliud

Rec. Ovorum Vitella 2. foliorum Violarum unc. 2. opii drag. 1. croci ſcr. 1. fiat linimentum.

Cataplaſma.

Rec. Medullæ panis albi, in lacte vaccino infuſe, lib. ſe. farinæ fabarum, hordei & orobi, & lentium, an. unc. 1. omnia diſſolvantur, foliorum hyoſciami coquantur ad craſſitiem, deinde adde olei roſarum, violarum, oxyrhodini an. unc. 1, opii, croci an. drag. 1. fiat Cataplaſma. Cold Cataplaſm.

Aliud.

Rec. Foli hyociami recentium M. 2. coque cum hydromel, admoveantur parti inflamatæ, cum pauca farina hordei.

Unguentum.

Rec. Unguenti roſati, unc. 6. populeonis unc. 2. mucilaginis, ſeminis pſylii & cydoniorum an. unc. 1. ſe. fiat unguentum. Cold unguent.

Aliud.

Rec. Seminis pſylii, olei roſacei, an. unc. 2. ceræ albæ, unc. 1. fiat unguentum.

¶ Of Narcoticks, which are Anodins Impropers.

LIke as in taking away paine there are thræ things to be obſerved, to wit, the cauſe of the pain, the pain it ſelfe, and the part where it is: for the which Galen hath ſet down thræ kinds of Medicaments. Of the which ſome take away the cauſe, ſome the pain and not the cauſe, others neither the cauſe nor pain, but onely the fæling of the part, & by accident the pain. Of the which ſome be ſimples, others compoſed. Galen forbideth the uſage of ſuch except the body be purged, and in no wiſe in weak parts and neare the noble part, for the great accidents which often doe enſue by the pain. *Trall. li 8 ca 6.* *Gal. lib. 3. de facul ſim c. 18.* *Gal. li. 3 met.*

Narcotickes Simples.

Mandragora, Hyoſciamus, Papaver, Lactuca, Succus opii

opii, ſempervivi, ſolani, camphora, oleum in quo torpedo viva, fuit extincta, cicuta.

Compoſita.

Cold compoſed narcoticks. Philonium, Romanum, Pillulæ de Cynogloſſo, Oleum hyoſciami, papiveris, mandragoræ quibus opii, nonnihil diluitur.

Unguentum.

Unguent narcotick. *Rec.* Unguenti populeonis, olei violacei, an. unc. 1. ſeminis hyoſciami, corticis mandragoræ opii, an. ſcr. 1. cereæ quantum ſufficit, fiat unguentum.

Chapter III.

¶ Of Medicaments Repercuſsives.

Gal. li. 5 ca 18. ſimp.

Nicol. Alexan.

The medicament Repercuſſive called by the Latines *Repercutiens* or *Repellens*, is that which by the cold qualitie putteth back the humor, or elſe by the aſtriction corroborateth the part, or by one or both letteth the fluxion of humors, of the which there are divers kindes, ſome are cold and humide, others cold and aſtringent, ſome hot and aſtringent, and are either ſimple or compoſed.

The Simple with ſmall or no aſtriction, like as roſa, endivia, lactuca, acetoſa, umbilicus veneris, portulaca, viola, nenuphar, aqua frigida, ſerum lactis, coriandrum, arnogloſſum, tritolium, parietaria hyoſciamus, poma, pira, albumen ovi, cauda equina, caprifolium, fartiora, virgula paſtoris, burſa paſtoris, plantago, ſolanum ſemper vivum, melones cucurbitæ, citruli, lens paluſtris pſylium, omphacinum, cydonia, myrtilli, malicoria, balauſtia, mandragoræ, acacia, ſanguis draconis, papaver, opium, bolus armenus, ceruſa, terra ſigillat. antimonium, plumbum uſtum & non uſtum, conſolida major, farina lupinorum & oribi, vitriolum, tapſus barbatus, nux cupreſſi, olivi folia. Repercuſſives hot and

and aſtringent are theſe, Conſolida major, abſynthium, centaurcum, marrubium, cardamomum, cyperus, calamus aromaticus, folia cupreſſi, farina lupinorum, & orobi, ſal, alumen, vitreoli ſpecies, and Sulphur, of theſe ſimples you may make compounds.

The Compounds.

Oleum roſarum, Omphacinum, Abſynthium, Olivarum, Cammomillinum, Maſticum, Mandragoræ, Papaveris, Cydoniorum, Myrtilorum, unguentum Citrinum, Populeum, album Raſis, deſiccativum Rubeum, ex litargyro, Santellinum, Roſatum, Bartholomeum, refrigerans Galeni, Pectorale, album Camphoratum, aqua Roſarum, Oxycrocum, Diamoron, ſyrupus Roſarum, Violarum, Aqua, in qua Verbena fuit decocta, Ceruſſa, unguentum Somniferum, empl. Diacalcitheos - Triapharmacum, Citrinum.

Linimentum repellens.

Rec. Muccilaginis ſeminis Pſilii & Cidoniorum in aqua Roſarum & Plantaginis extractæ unc. 1 pulveris Santali albi, Roſarum Rubrarum, ſeminis Plantaginis, an. drag. ſe. cum pauco cerato refrigerantis Galeni & oleo Roſaceo, fiat linimentum. Linement repercuſſive.

Aliud.

Rec. Olei Roſati & Omphacini, an. unc. 1 unguenti Populeonis & Comitiſſæ, an. unc. ſe. agitentur ſimul in ſucco Plantaginis & Solani ad Succorum conſumptionem.

Ceratum repellens.

Rec. Unguenti Roſati drag. 6 Santali Rubei drag. 5 Santali albi & Citrini, an. drag. 2 ſe. Boli armenici drag. 3 Spodii drag. 2 Camphoræ dsag. 1 ceræ albæ unc. 2 olei Roſati lib. ſe. Cerat repercuſſive.

Cataplaſma.

Rec. Muccigilanis Pſilii & Cidoniorum in aqua vel ſucco Plantaginis, & Opii extractæ unc. 3 farinæ Hordei unc. 2, fiat Cataplaſma. Cataplaſm repercuſſive.

Aliud.

Rec. Succi Oxalidis, Oxylapathi, an. unc. 4 farinæ Hordei, unc. ſe. coquantur, & fiat Cataplaſma.

Chapter IIII.

¶ Of Attractives.

The medicaments Attractives which the Greeks call *Electicon*, by the Latines *Attrahentia*, are contrary to the Repercussives. For so much as they draw from the Centre to the circumference, and are of temperature hot, and substance thinn, to the end they may peirce more easily; and may be divided into three sorts. The first draweth by the naturall heat, the second by putrefaction, the third by an hidden property; some add the fourth kind, *per fugam vacui*: like as in ventosing, boring, sucking, by bandages, frictions, hotsteaches, dilicatories, medicaments, caustick, the which indeed be not properly called medicaments Attractives. Of the foresaid there are two kinds, viz. Simples, and Compounds.

Gal. 5. simpl.

Simples.

Like as Sabina, Capri, Aristolochia, Tapsia, Hermodactylus, bryonia, omnes titimallorum species, radix lilei, abrotanum, urtica, serpentaria minor, gentiana, asphodelus, bdellium, opopanax, gummi rutæ, calx viva, nasturtium, assa fetida, Xilobalsamum, carpobalsamum, thus, myrrha, majorana, flos rosmarini, narcissi radix, radix bryoniæ, brassica, aqua vitæ, aqua marina, beruli, ammoniacum, hederæ, pix, bitumen, calx viva, sulphur, radix cichaminis auripigmentum, arsenicum, calcanthum, ammonicum, calaminthum, allium, dictamus, Sinapi, assarum, Sigillum beatæ Mariæ, galbanum, viscus querscinus, euphorbium, pyrethrum, cantharides, nitrum, omnes salis species, cinabrum, hydrargyrus, unguellis.

The Compounds.

Oleum Hederæ, Viscus quercinus, pix liquida, terebinthina, oleum philosophorum, vulpium, laurinum, rutaceum, Aoetinum, petrolium, de castoreo, de tartaro, de hypericone, de nuce indica & muscata, de sulphure, de lateribus,

bus, Unguentum Aragon, Martiatum, Fuſcum, Nicolai, Agrippæ theriaca, Sapa, Mithridatum, Confectio anacardina, Emplaſtrum diachilum magnum & parvum, de meliloto, apoſtolicon nicolai, Oxicroccum. **Thoſe which draw by putrefaction,** Stercus omne, Preſertim columbinum, Caprinum, Fermentum, Caſeus vetus. **Thoſe which draw by property occult:** Omnia medicamenta purgantia, Ambar, Pæonia, Magnes.

Unguentum attrahens.

Rec. Ammoniaci, Galbani, Sagapeni, an. unc. 1 diſſolvantur in aceto, ut artis eſt colentur, deinde adde terebinthinæ, unc. ſe. olei veteris parum, fiat unguentum. Attractive unguent.

Emplaſtrum.

Rec. Spumæ argenteæ, Ceruſſæ, Salis, an. unc. 2 omnia ſeorſim tritieum oleo veteri, Subigantur & coquantur, deinde uſui ſerventur. Attractive emplaſter.

Aliud.

Rec. Radicum arundinis unc. 2 florum Angelice, Mani, Radicis brioniæ, Althææ. unc. ſe. contundantur ſimul & melle accipiantur & admoveantur parti.

Cataplaſma.

Rec. Ficus pingues, N. 6 paſſularum mundatarum unc. 1 coquantur, Adde poſtea ceparum ſubcinoeribus coctarum, Capitum liliorum alborum, an. unc. 3 Mice cum fermento, Sale, & vitellis ovorum, fiat Cataplaſma. Cataplaſm. attractive.

Dropax.

Rec. Picis liquidæ, Ceræ, Colophoniæ, an. unc. 2 olei veteris li. ſe. nitri drag. 2 ſulphuris vini. Drag. 1 ſe. piperis albi, Euphorbii an. drag. 1 Miſce ſimul, fiat Dropax.

CHAPTER V.

¶ Of Medicaments Reſolatives.

THe Medicament Reſolative, which the Greeks call *Diaphoreticum*, the Latines *Reſolvens* or *Digerens*, and com-

commonly called *Carminativum* rarifieth and evaporateth by inſenſible tranſpiration the humors, openeth the pores of the skinn, and is of qualitie hot which are divided into two ſorte, to wit, the Proper which is weake, and Improper which is ſtrong.

The Propers.

Proper reſolatives ſimple. Sabina, majorana, Roſmorina, Ciclaminis, Origanum, Abſynthium, Melilotis, Atriplex, Spicanardi, Camomillum, Anethum, Aniſum, Cumminum, Hiſſopus, fumus terræ, Malua, Parietaria, Urtica, Ebulus, Sambucus, Valeriana, ſemen Lini, Abrotanum, Adianthum, medulla cervina humana Ariſtolochia, Braſſica, Brionæ radix, Furfur, Fenigrecum, Galbanum, Hordei, Tritici, Lupinorum, farina Erui, Malva cum toto, Melilotum, Menta, Mercurialis, Piper, Reſina, Sulphur, Stercus omne, Therebinthina, adeps Anſerinus, Anatinus, Gallinaceus, Cervinus, Leonis, Caſeus vetus, aqua calida, Vinum, Lana ſuccida.

The Impropers.

Impropers reſolatives ſimple. Semen Urticæ, Dictamum, Ciclamen, Cæpa, Radix, Cucumeris agreſtis, Apium, flos Roſmarini, ſpuma Nitri, Acetum, Hermodactilus, aqua vitæ, Piretrum, ſemina omnia calida, baccæ Lauri, Origanum, Coriandrum, Cinamonium, Chereſolium, nux muſcata, calamus odoratus, Sabina, Majorina, Pulegium, Abſynthium, Aniſum, Spicanardi, Piper, Stercus Caprinum.

Compoſita reſolventia.

Compound reſolatives. Oleum Camomille, Aneti, dulce, vetus, olcerx Mirrhæ Terebinthinæ, Hypericonis, Majoranæ, Violarum, de Cera, de Croco, de Bombace, Terebinthinæ, Sinapi, Sulphureum, Petroleum, Tartarum, Lumbricorum, catellorum, Liliatum, Vulpinum, Amygdalarum, dulcium, amararum, Sambuci, juniperi, de lateribus, Scorpionis, Salviæ, Minthæ, Ruraceum, de Euphorbio, de Tartaro, de Spica, de Petroleo, de Baccis, Vitellus Ovorum, Irinum, nardium, ſeminis Lini laurinum Philoſophorum, omne oleum igne calefactum, Emplaſtrum, Stomaticum, Diachilon magnum, de baccis Laurii, de ranis, marciatum,

marciatum, Iriatum, de vigo, de melliloto, Philippi philagrei, unguentum reſumptivum, arragon, enulatum, neapolitanum, oxycroſium, meſuæ, agrippæ, gummi ammoniacum, dellium, apeponax.

Unguentum reſolvens materiam calidum.

Rec. Olei Camomillæ, Liliorum & violarum, an. unc. 1 butiri recentis ſine ſale drag. 3 cere quantum ſufficit, pulveris, camomellæ, drag. 1, fiat unguentum. Unguent reſolved hot.

Unguentum reſolvens frigidam materiam.

Rec. Olei Liliorum, ſeminis lini & erini, an. unc. 1 ſe. emplaſtri de muſilaginibus de mellilo, an. unc. ſe. pulveris ireos betonicæ, an. drag. 1, fiat unguentum. Unguent reſolved cold humors.

Cataplaſma reſolvens.

Rec. Farinæ fabarum, lini & fenigreci, an. unc. 1 diſſonantur & coquanter in oxyerato ad pultis craſſitiem, adde pulveris florum camomillæ & melliloti, an. drag. 1 ovorum vitellos, 3 croci drag. 1 olei camomillæ & aneti, an. drag. 3 butiri recentis, unc. ſe. fiat Cataplaſma. Cataplaſme reſolved.

Ad flatulentum tumor.

Rec. Olei anetini, & Liliorum, an. unc. 2 Olei rutæ & laurini, an. unc. 1 ſucci rute, unc. 2 bulliant ad ſuccorum conſumptionem, ceræ quod ſufficit vel loco ſucci aduce tantillum aquatviæ ad penetrationem. To reſolve wounly tumors.

Ad hydropicos & equoſes humores.

Rec. Stercoris Columbini, Caprini & vaccini, an. P. 1 florum rutæ Camomillæ recentium ſeminis Lini & Anethi an. P. 1 ferementi veteris, unc. 2 Nitri drag. 2 bulliant omnia ſimul in aqua decoctionis Apii, deinde piſtentur & ſuper lanam ſuccidam bene carpinatam cataplaſmatis inſtar extendantur, deinde calido ventre, hydropico aut hydrocele applicetur. To reſolve a watry tumor.

CHAP-

Chapter VI.

¶ Of Medicaments Emollients.

The Medicaments Emollient are called by the Greeks *Malattica*, and by the Latines *Emollientia*, the which have the vertue to soften the hard parts, and bring them to their naturall estate, of the which some are Common, and some Proper.

The Common,

Gal 5. simpl. Are those which have the vertue to soften the hard parts, which is done either by congelation, extenuation, or dryneſſe.

The Proper,

Are those which soften the hardneſſe done by congelation, and are meanly hot, or else dry or humid, for if the hardneſſe be done by congelation, the medicament muſt be hot and dry. If it be wrought as often chanceth in schirres, the medicament muſt be hot and humid, always whether it be hot, humid, or dry, it muſt be more moderate than the attractive, and leſſe than the supurative. In the usage of the remedies two things are to be observed, the one, if any of the noble parts be hard, we apply no mollients except they be mixed with the astringents, neither they be used in tumors scirrous, the which are either simple, or composed.

Gal. 13 meth lib 5 sim. c. 2

The Simples.

As Medulla cervina, Equina, Canina, Vitulina, Vaccina, Ursina, Hædina, Leporina, Humana, Porcina, Gallina, Caprina, Leonina, Anserina, Anatina, Vulturina, Butyrum, Gummi ammoniacum, Bdellium, Apopanax, Galbanum, Sodanum, Terebenthina, Resina, Colophonia, Pix, Herbæ remollientes, Malus cum toto, violaria, Parietaria, Mercurialis, Beta, Narciſſi radix, Radix brioniæ, Cucumeris silvestris, Semen lini, Radix liliorum, Althea, Atriplex, & fenugreci, Ficus pinguis, Hordei & tritici farina, Caput & pedes aretis cocti, Cum pelle in aqua vel lacte. Here you muſt mark that the marrowe

row and greaſe of all kinde of animalls, which are of the high kind, are more hot than the females and Eunuches; and that of wild beaſts and fowles, is more hot than the domeſtick or tame.

Compoſita emollientia.

Oleum Liliorum, Lumbricorum, Amygdalarum dulcium, de lino, camomillæ, vulpinum, juniperinum, oleum vetus, althea, ceratum filii ſatharix, unguentum agrippum, reſumptivum, nicolai, diachilum magnum, cum gummis, triphaarmacum, de muſilaginibus, de althea, ceratum philagrii, oxycroceum, ceroneum, de vigo ſine mercurio, oleo liliorum & lino diſſolutum, hydrolium, Compound remedies reſolved.

Emplaſtrum remollens.

Rec. Emplaſtri de muſilaginibus & Diachilon communis an. unc. 2 emolliantur cum oleo liliorum, fiat maſſa emplaſtri, adde pulveris Ireos & ſulphuris parum. Softening plaſter.

Aliud.

Rec. Cerati Filii Zacharæ & philagrii an. unc. 3. unguenti vigonis ſive mercurio, emplaſtri de melliloto & diachilon iriati an. unc. 1 ſe. amoniaci in aceto diſſoluti unc. 1 pulveris ſeminis urticæ drag. 2 miſce cum unguento de althea, & oleo camomillæ, fiat ceratum, & valet ad tumoris gutturis, parotidis & aliarum partium. Softening Cerat.

Emplaſtrum remollens & reſolvens.

Rec. Unguenti de althea unc. 1 emplaſtri de muſilaginibus & diachili iriati an. unc. ſe. emplaſtri oxycrociæ, melliloti, & ceronei, an. drag. 2 malaxentur cum oleo liliorum, camomillæ, & parum ceræ ſi addideris amoniacum, bdellum major vis erit. Reſolving plaſter.

Cataplaſma emolliens.

Rec. Farinæ hordei unc. 1 foliorum caulum coctorum & præparatorum manipulos duos, vitellos ovorum duos, olei liliorum quantum ſuffi.it, fiat cataplaſma. Cataplaſm reſolving.

Aliud.

Rec. Furfuris macri triturati manipulum unum, amoniaci in oxymellite diſſolati unc. 2 miſce & fiat cataplaſma.

CHAP-

Chapter VII.

¶ Of Medicaments Suppuratives, or maturative.

The Medicaments ſuppurative, or maturative, called by the Greeks *Pepica*, by the Latines *Maturantia*, are thoſe, which by their naturall heat cauſeth and bring the blood and humors ſuperfluous into matter; of the which there is two ſorts, ſome be emplaſtricks which by cloſing of the pores augment the naturall heat, ſo that the matter being retained, maketh generation of *Pus*; the other kind is hot according to the proportion of the naturall heat of the part affected, of the which there are ſimples and compoſed.

Hip. 6. epidemiorum.

Simples.

Like as Aquæ Focus modice calens radix Althea, Liliorum capita, Violarum, Malus, Acetoſa, farina Triticia, Hordeacea, volatilis Fenugreci, medulla panis tritici, Fermentum vetus, adeps Porſinus, Viculinus, Vaccinus, Butyrum, Pix, Reſina, ſemen Lini, Fenugreci, Bugloſſi, radix Brioniæ, Cepæ, branca Urſina, radix Cucumeris Agreſtis, Senecio, Bugloſſum, bis Malva, Parietaria, Ficus, Paſſulæ, Cepe, Ciclaminis, as alſo all medicaments which are of temperature hot and humide, being mixed with medicaments emplaſtrick ſubſtance that may cloſe the pores, Poma, Malva cocta, vitellus Ovorum, mel Crudum, Amoniacum, Galbanum, Laddanum, Thus, Styrax.

Compoſita.

Oleum Liliorum, Ol. Ovorum, Butyri, Hyperici, Lumbricorum, Hypericonis, Reſina, unguentum Baſiliconis utrumque, Diachilum magnum, commune parvum & album, Macedonicum, triapharmatum Galeni, de Muſcis ginibus, unguentum Reſumptivum, emplaſtrum de Fermento, Democriti, Macedonicum.

Cataplaſma ſuppurans.

Suppurative Cataplaſme.

Rec. Farinæ Hordei, Tritici, an. unc. 1. Mellis roſati & violati, an. unc. ſe. cum Ovi vitello, fiat Cataplaſma.

Aliud.

Aliud.

Rec. Olei violati, unc. 1. ſe. cum ovi vitello, agitetur cum unguento baſilici parum, & admoneatur parti, multum valet in corporibus puerorum. Suppurative for delicate people.

Aliud.

Rec. Althæ cum toto, foliorum parietariæ, malvæ, Violarum, brancæ urſinæ, an. M. ſe. ſeminis Malvæ biſmalvæ, lini & fenegreci, an. drag. 3. ficum pinguium, numero 4. coquantur in aqua, deinde bene contuſa cribrantur & paſcentur perſetaceum quibus adde farinæ fabarum & hordei an. unc. 1. olei liliorum & butyri recentis, & axungiæ ſuillæ an. unc. ſe. fiat Cataplaſma.

Unguentum.

Rec. Diachili magni & albi, an. unc. 1. unguenti reſumptini, unc. ſe. baſiliſi, unc. ſe. olei lumbricorum parum, fiat unguentum. Unguent ſuppurative.

Aliud pro partibus nervoſis.

Rec. Farinæ hordei. unc. 1. ſe. ovorum vitellus duos, terebinthinæ & olei liliorum, an. unc. ſe. fiat Cataplaſma. Suppurative for nervous parts.

Aliud

Rec. Olei nucum, Axungiæ ſuillæ veteris, an. unc. 2. ceræ flavæ, unc. 1. ſe. mellis comunois, fiat unguentum his omnibus ſimul liquatis.

CHAPTER VIII.

¶ Of Medicaments mundificatives, or abſterſives.

THe Medicament cleanſing, called by the Greeks *Ripticon*, and by the Latines *Detergens*, is that which hath the ſtrength to ſeparate and draw away the excrements purulent from the center of the Ulcers to the circumference, the which is of temperature hot, and of ſubſtance thin: and is of two kinds, the one is weake, domeſtick, and is either ſweet or ſalt, as farina fabarum, hordei, cicerum, ſemen lini, ſaccarum,

Saccarum, Oxymell. Terebinthus, Thus, Mel diſpumatum, Amygdalæ amaræ, cui Farina. Radix indicus, Nitrum uſtum, Nitri ſpuma, Pumex, and divers others which Galen hath written at length in the Chapter above mentioned, and are divided in ſimple and compounds.

The Simples.

Like as Farina fabarum, Hordei, Lupinorum & Oribi, Abſynthium, Agrimonia, Betonica, Apium, Myrrha, Thus, Sarcocolla, Aloe, Abrotanum, flos Æris, Fellis, Leporis, Flecas, Pix reſina, Pix græca viridis Æris, Tuthea preparata, Mel, enula Campana, Bryonia, Serpentaria utriuſq;, ſigillum beatæ Mariæ, conſolida major cum toto conſolida regalis, Terebinthina, Iris, Centaurea minor, Solani radix, Arnogloſſum, Gentiana, Marrhubium, Calx lota, Helleborus, Æs uſtum, calchantum crudum & uſtum, Auripigmentum, Allumen, Serum Lactis, Butyrum, ſtercus Caprinum, Amigdalæ, Ariſtolochia utraq;, Meliſſa, Eupatorum, Fumeſtore, Artemeſia, Maſtick, Sarcocolla, Dragagantum.

The Compounds.

Compound mundificatives. Oleum de vitellis Ovorum, Hypericonis, Mellis, Myrrhæ, Guajaci, Terebinthinæ, de Tartaro, unguentum Fuſcum, Diapompholigos, unguentum viridi Andromachi, emplaſtrum divinum, de Apio, Apoſtolorum, Ægyptiacum, pulvis Mercurialis, Farina Frumenti, Hordei, Mel ſolutum cum oleo Roſato.

Emplaſtrum detergens.

Emplaſter mundificatives. *Rec.* Terebinthinæ venetæ unc. 7. Gummi Elemni, unc. 3. reſinæ unc. 1. ſe. liquefiant omnia ſimul, deinde refrigeratis quodammodo, adde pulveris Ariſtolochiæ longæ unc. ſe. ſanguinis Draconis unc. 1 ſe. fiat Emplaſtrum.

Medicamentum blande detergens.

Cleanſing medicaments. *Rec.* Mellis coſati unc. 1. vitellum unius Ovi, farina Hordei quantum ſufficiat Terebinthinæ in aqua Plantaginis lotæ drag. 2.

Unguentum detergens.

Unguent cleanſing. *Rec.* Olei Hipericonis unc. 2. Gummi Elemni unc. 1 ſe. ceræ

Ceræ unc. ſe. Terebinthinæ unc. 1, miſce & fiat unguentum.

Aliud.

Rec. Picis Refinæ lib. 1, Picis græcæ lib. ſe. butiri recentis lib. 1 ſe. viridis æris drag. ſe.

Aqua detergens.

Rec. Florum æris uſti unc. 3, Tutiæ preparatæ in vino albo unc. 1, vini albi odoriferi unc. ſe. aquæ plantaginis unc. ſe. miſce omnia ſimul. Cleanſing water.

Aliud.

Rec. Vini albi unc. 2, Floris æris drag. 1 auripigmenti, drag. 2, miſce ſimul cum aqua roſarum.

CHAPTER IX.

¶ Of Medicaments Incarnative.

THis Medicament which the Græks call *Sarcoticon*, the Latines *Generatio carnis*, hath the force to dry and change the blood which cometh to any part, into fleſh. It dryeth without mordication, it thickneth it, and converteth it into fleſh. Such medicaments by the abſtertion and deſiccation moderately done, help nature. It ſhould be drie in the firſt degree, to the end the two excrements which are groſſe and ſubtill, being contrary. viz. abſtertion and deſiccation, may not let the action of nature in the generation of fleſh. Of the which there are three kinds, viz. weak, ſtrong, and very ſtrong, becauſe in a wound or Ulcer the ſuperfluous humiditie exceedeth the naturall habitude, as for example, if an Ulcer be in a very dry part, the medicament muſt be more drie, for this cauſe there be ſarcotick medicaments drie in the 4 degree. *Gal. 2. meth. & 2. de compoſitio. phar. Gal. ſimp. 6.*

The weak.

Olibanum, colophonia, maſtick, aloe, farina hordei, fenogreci & debent applicari corporibus humidis & delicatis.

The ſtrong.

Ariſtolochia, iris florentina, farina lupinorum, orobi, calchantum uſtum & debent applicari corporibus ſiccis, & vulneribus concavis.

The

The moſt ſtrong.

The moſt ſtrong are proper to be applyed in deep ulcers, as centaureum majus & minus, plumbum & antimonium uſtum, glutinum aduſtum, limaces, myrrha. If a wound or ulcer be aierie, yet in a manner be very humide, the medicament muſt be drie in the firſt degree. If the wound or ulcer be charged with great humiditie, and the part nevertheleſſe very drie, the medicament muſt be drie in the ſecond and third degree. Of the which ſome are ſimples, others compoſed.

The Simples.

Olibanum, Maſtica, Aloe, Borax, Colophoniæ, farina lupinorum, orobi, hordei, fenegreci, fabarum, lentium, tritici, ariſtolochia utrâq;, radix iris florentiæ, vitriolum, uſtum, pix liquida & ſicca, myrrha, ſarcocolla, mel, antimonium, plumbum uſtum, oleum omne, pompholigos utrâq;, betonica, ſuccus piloſellæ, burſa paſtoris, ſquamma æris, hypericon, centarea minor, ſanicula, verbena, ſcabioſa, pimpinella, lingua canis, cervina, thus, dragagantum, terebinthina, ſemen hyperici, artemiſia, lingua bovis, polinum, gummi arabicum, cadmia, tuthia.

The Compounds.

Oleum roſatum, Abſynthii, Maſtici, de nuce muſcata cydoniorum, vitellus ovorum, Irinum, Omphacicum, thuris, ſarcocollæ, unguentum aureum, baſilicum Meſues, emplaſtrum gratiæ Dei, crocum, comitiſſæ; de betonica, diapalma, triapharmacum, ceruſe, pretioſum agordone deſcriptum, de janua, nigrum.

Emplaſtrum Sarcoticon.

Emplaſter incarnative.

Rec. Centaureæ minoris manipulos tres, macerentur viginti quatuor horis in vino albo, deinde quoq; ad mellis craſſitiem, adde lactis muliebris, unc. 1. terebinthinæ unc. 6. ceræ novæ, unc. 2. reſinæ, unc. 1. thuris, maſticis, gummi arabici, an. unc. ſe. fiat emplaſtrum.

Unguentum Sarcoticon.

Ueguent incarnative.

Rec. Pinguedinis anſeris, porci, gallinæ & mellis an. unc. 1.

unc. 1 aloes & calcis vivæ tantillum, ſucci braſſicæ quantum ſufficit, miſce, & fiat unguentum.

Aliud robuſtioribus corporibus.

Rec. Pulveris Ariſtolochiæ rotundæ, corticis Iridis, thuris an. drag. 3, aloes, myrrhæ, cadmiæ, maſticis an. drag. 3 mellis quod ſatis erit.

Aliud ex Ætio.

Rec. Farinæ, tritici, drag. 2, colophoniæ, drag. 1. miſce.

Aliud.

Rec. Raſuræ panni linei bene mundati drag. 5, opoponacis drag. 2, mellis, olei roſatum an. drag. 5, litargyri. aloes, ſarcocollæ an. drag. 1, ſe fiat. unguentum.

Pulvis Sarcoticus & Cephalicus.

Rec. Pimpinellæ, Betonicæ, Gariophilatæ, Valerianæ, an. drag. 1, philoſellæ drag. 5, fiat pulvis quo cavum ulcus inſpergatur.

Chapter X.

¶ Of Medicaments Cicatrizants.

The Medicament Cicatrizant, called by the Greeks *Epulaticon*, by the Latines *Cicatrizans*, is that which hath the power to make and cicatrize by his dryneſſe and aſtriction without acrimony drying the fleſh in ſuch manner, and maketh it in ſubſtance like to the skinne, yet not according to the firſt intention, by reaſon that parts & permaticks doe not ingender in al points as before. This medicament is hot in the third degree, and is divided into ſimples and Compoſed.

The Simples.

As allumen uſtum, vitriolum uſtum, galla, ſpongia uſta, litargyrum, polypodium, terra ſigillata, ſquamæ æris, ariſtolochia rotunda, canthares, maſticorium, olivæ, apii ſemen tritum, flos mali granati, roſæ, haethum uſtum, aloë, cortex lignorum, pomphulyx, ſpodium, nux cupreſſi, calx lota,

æs uſtum, mineralia uſta & lota, myrrha, thus, plumbum, radix cucumeris ſilveſtris, bolus armenus, ceruſſa, ſarcocolla, pumex uſtus, terra lemnia, calchantum ſive attramentum ſutoreum.

Compoſita.

Emplaſtrum de ceruſſa, de minio, album raſis, Vigonis, triapharmacum, diacalcithios, deſiccativum, rubeum, diapompholigos, aqua aluminoſa, & plura, deſcripta in capitibus de vulneribus.

Emplaſtrum Epiſticum.

Emplaſter ſiccatrizant. *Rec.* Lapidis calaminaris, terræ ſigillatæ an. unc. 4. ceræ novæ unc. 5. olei roſati unc. 2. olei hyoſciami & papaveris albi an. unc. 2. ſe. olei violarum unc. 4. aquæ vitæ drag. 3. fiat emplaſtrum.

Pulvis.

Powder ſiccatrizant. *Rec.* Sarcocollæ, Glutinis piſcium, Chryſocollæ, plumbi uſti, ſquamæ ferri an. drag. 1. miſce, fiat pulvis.

Ulceribus pudendorum citra morſum ſiccantis.

Ulcers in the Yard. *Rec.* Aloes loti & æris uſti an. unc. ſe. pulverescentur tenuiſſimè cum pulvere malecorii & balauſtiorum & uſui ſementur.

Aliud.

Siccatrizant water. *Rec.* Olibani, Aloes, ſanguinis draconis an. drag. 3. Ariſtolochiæ rotundæ, ceruſæ, corticis pini, centaurii minoris an. drag. 1. gallarum, balauſtiorum an. drag. 2. fiat pulvis.

Aquæ Epiſticæ.

Rec. Succi portulacæ, Caprifolii, Acetoſæ, Arnoglоſſæ an. lib. 1. albumina ovorum viginti, aluminis rupis pulveriſati lib. ſ. vitrioli romani unc. 6. miſce, & diſtilla.

Chapter XI.

¶ Of Medicaments Agglutinatives.

The Medicament Agglutinative called by the Greeks *Simphiticon* by the Latines *Agglutinans*, is that which hath the vertue to dry the humidity that is betwixt the lips

of

of the wound, and are dry in the ſecond degree, of the which ſome be ſimples, ſome compoſed.

The Simples.

Maſtix, ſarcocolla, thus, myrrha, colophonia, bolus armenus, terebintina, terra ſigillata, ſanguis draconis, hypociſtis, flos roſmarinus, ſuccus centinodiæ, myſotidæ, balſamum naturale & artificiale, ſanguis humanus combuſtus gummi dragaganti, elemnii, hedetæ, olibanum, terra lemnia, fotus vini rubei, conſolida, petræa, verbenæ, melliſſollium, argentina, talictrum, arnoglofſa, herba roberti, ſanicula, conſolida minor, morſus diaboli, caprifolii, tela aranearum, cauda equina, nux cochlearum, ſic limacum terreſtrium, ebulus, ſambucus, pentaphylon, folia pyrorum ſilveſtrium, malorum, granatorum.

The Compounds.

Emplaſtrum nigrum, diapalma, de centauria, unguentum regis angliæ, unguentum de vermibus, oxoleum galeni, ad fracturas oſſium.

Liquor pro omni ulcere, aut vulnere cavo.

Rec. Terebinthinæ venetæ lib. 1. Aquæ vitæ lib. 3. vitrioli romani unc. 4. herbæ primulæ utriuſq; M. 3. diſtilla in alembico vitreo. Liquor agglutinative.

Balſamum D. S. Johannis.

Rec. Olei lini, & olivarum an. unc. 4. terebinthinæ venetæ lib. 1. æruginis æris & vitrioli romani an. dra. ſe. bulliant parum lento igne & ſerventur, ſi volueris accomodare ulceribus, vice olivarum & ſambucii accipies parum portione mercurii ſublimati diligenter pulveriſati. Agglutinative Balme.

Chapter XII.

¶ Of Medicaments Cathereticks, Septicks, and Cauſticks.

The Medicament which the Greeks call *Catherreticon*, the Latines *Carnis Conſumptivum*, is that which hath the force to corrode, and putrifie in digering the ſubſtance

of the flesh and skinne, and may differ in 3 manners, viz. weak, strong, and very strong. The weak is called Catheretick, or Corosive; the strong is called by the Greeks *Septicon*, and by the Latins *Putrefactivum*; the very strong is called *Escareticon*, and by the Latines *Causticum*. The Catheretick hath the strength by vehement drying to consume the excrescences of flesh, as Polypus, Tuberculum, Verrucæ, and is applyed commonly in wounds and ulcers putrides, or where there are excrescences of flesh, the which cannot be taken away neither by digerents nor astringents, and it is of two sorts, Simple and Composed.

The Simples.

Radix Asphodelorum, Hermodactylorum, Pyretrum, Oxilum, calx mediocriter lota, vitrioli omnia genera, squammæ æris, flos æris, allumen ustum & non ustum, sall torrefactus, pompholix, Plumbum ustum, antimonium sive stibium, hydrargyrus sublimatus & precipitatus, cinabrum, lana succida, usta, & in pulverem redacta, squammæ æris, ærugo, calchantum, trossisi, andronius, cedis figilli beatæ mariæ, serpentaris utriusq; brioniæ, cicla minis, ranunculus, apium risus, & regale, titimalorum species, sinapi, euphorbium, cantharides.

The Compounds.

Unguentum Ægyptiacum, unguentum omne detersivum cui permixtum fuerit aliquid ex predictis his medicamentis.

Pulvis Catheraticus.

Rec. Cerussæ ustæ, Lytargyri, Corticis pini, myrrhæ, galbanum omnium an. drag. 2, pulverisentur ut alcoal.

Medicamen putrefactive.

The medicament Septick is stronger than the Catheretick, for by the great heate and thinne substance, it hath the force to ulcer þ skin, likewise þ flesh, yet with little dolour. Nevertheless, this kinde of medicaments is somewhat dangerous, like as arsenicum, auripigmentum, putrum tum sublimatum, brioniæ, chrysocollæ, sandaracha, apium radix,

figilli

ſigilli beatæ mariæ. Omnes tithimali ſpecies, ſinapi, euphorbium, cantharides, ranunculus, apium riſus, apium rigale.

Medicament Cauſtick.

The Cauſtick which the Græcks call *Eſcaroticon* is very ſtrong, becauſe it conſumeth not onely the ſoft parts, but alſo the hard, making a ſcarre after divers maners, as yæ have heard in the Chapter of Cauters, the which are hot in the fourth degrée. Like as calx vina, arſenicum, ſublimatum, nitrum, vini fex uſti, lixivum forte, calchantum, ſalnitrum, thapſis.

Eſcaroticon ex Ætio.

Rec. Sulphuris, Radicis braſſicæ an. unc. 2. Axungiæ porci veteris unc. 4. miſce ſimul.

Veſſicatorum.

Rec. Cantharidum abjectis capitibus & alis, drag. 3. ſucci flammulæ vel pedis corui unc. 2. ſe. fermenti veteris unc. 2. piperis longi drag. 1. ſe. miſce, fiat emplaſtrum. A medicament to breake the head.

Aliud ex Bartapallia.

Rec. Fermentum non ſiccum, & fac ipſum tenerum fortiſſimo aceto, deinde accipe cantharides quantitate quæ ſufficit, & pone ſuper fermento, & appone loco affecto eſt mirabilis juvamenti in humoribus trahendis à capite, & vento ſitatibus diſſolvendis à facie.

Aliud.

Rec. Flammulæ M. 2. contundantur diligenter & parti applicentur: Item fieri poteſt de perſicaria, de appio ſilveſtri, radice ranunculi, & de viburno.

Chapter XIII.

¶ Of Medicaments which ſtay the Flux of Blood.

Becauſe the Blood is the treaſure of life, it is moſt needfull when it floweth exceſſively, to ſtay the ſame, otherwiſe death ſhall follow. This medicament is of nature and qualitie cold, and is either ſimple or compoſed.

The ſimple.

Bolus Armenus preparatus, Terra ſigillata, ſanguis draconis, crocus martis, veneris, calx teſtarum ovorum, colcothar ſimplex, colcothar dulcificatum, ceruſſa, cadmia, lytargirum, gipſum, thus, aloe, maſtix, reſina, gluten, Amylum, grana paſſularum rubrarum, portulaca, ſempervivum, cauda equina, auricula muris, umbilicus veneris, pſylium, farina volatilis, Corallum⁹ utrumq; lapis hæmatites, calchantum uſtum, dragagantum, ſarcocolla, gummi arabicum, pili leporis uſti, ſanguis humanus uſtus, antimonium, centinodium, tela araneorum, & alia quæ audivilti in Capite de vulneribus venarum & arteriarum.

Pulvis aſtringens.

Powder to ſtay blood. *Rec.* Thuris partem unam, pilorum leporis minutim inciſorum partem ſe. fiat pulvis.

Aliud.

Rec. Balauſtiorum unc. 3. alluminis unc. 1. vitrioli uſti unc. ſe. miſce, fiat pulvis.

Aliud.

Rec. Thuris partem unam, ſanguinis draconis partem ſe. calcis vivæ partem tertiam, fiat pulvis.

Cataplaſma.

Cataplaſme to ſtay blood. *Rec.* Thuris, Aloes, ſanguinis draconis, boli armenici, an. partes æquales, omnibus cum ovi albumine acceptis, cum pilis ventris leporis minutim inciſis, fiat cataplaſma.

Hemeragia deſperata ex Avicenna.

Rec. Vitrioli uſti unc. 2. ſe. Thuris unc. 2. Aloes & Glutinis ſicci an. unc. 1. arſenici unc. ſe. gypſi pulveriſati unc. 2. ſe. miſce & fiat pulvis, cui aſpergatur pluma ceolis.

Chapter XIIII.

Of particular Remedies, and firſt of Oyles.

HAving heretofore ſpoken ſomewhat generally of Medicaments which ordinarily are uſed by Chyrurgions; ſo

so now I will speak more particularly for the better instruction of the young Artificer, beginning at Oiles, of the which there are four kinds. The first, is that which is drawen out of Olives, and is vulgarly called simple or common oile, well knowen to all men. The second, is that which is drawen of the expression of seeds, like as oile of Almonds, and is thus made. Take Almonds and beat them in a morter of stone or Marble till they become paste, then heat that paste with the vapour of hot water, then work it much with your hands, then put it in a Canvas cloth made hot, and put it in a hot presse, by this means ye shall draw a very clear sweet oile. After the which form ye may make oile of bitter Almonds or Nuts: also of seeds of Cucumbers, Melions, Gourds, Paeonia Christi, Staphisagria, Hemp-seed, Line-seed, Poppie, Isiquiam, or other seeds. These sorts of oiles may also be extracted after the form ye doe the third kind of oiles. The third kind, is that which is done by the force of fire, like as oiles of Eggs, which is made of the yolks of 20 Eggs or thereabouts, that have been hard boiled in water, then bruise them small with your hands, and put them in a Frying-pann that is well luted with Lead, frie them and move them with a spoon or peece of wood, till such time as they become red, and you perceive some oile, then put them in a peece of Canvas and presse them, as in the first sort you have heard. As touching other oiles which are composed after this form; as also the oile which the Philosophers doe call oile of Tartare, the form whereof is particularly set down by Mesues, and others, so not needfull here to insist further; as also because those oiles be not much used. The fourth kind, is that which is made of oile, wherein is boiled some parts of certain hearbs or beasts, which having left their quality in the oile, are crushed through a cloath or pressed: Then if any humor doe rest in the oile, it must be consumed by boiling, like as all other oiles that are made with any liquide juice, or wine. For if any liquide juice, or humor

remain, it doth rot and consume the oile: then if any such humor doe remain in the oile, you shall know by putting a drop of it on your hand, then if any humor be, you will perceive the oyle to swimm above the liquide humor. Such oyles as are made of flowers, are either put long in the sun, or boiled at a small fire; and such as are made of Animals or Beasts, are made by putting of those Beasts quick into the oile, and make them to die, the which form is used with Scorpions, Serpents, Doggs, Froggs, Force, and such like.

Oleum Rosarum.

Rec. Cumarum rosarum rubrarum recentium, well cleansed and bruised, succi rosarum an. li. i. macerate them in 3 pound of oleum Omphacinum, or well washed in oile, then put all close in a glasse the space of five or eight daies in the the Sunn, then boile them three houres in a double vessell, thereafter strain the lees, and put in new again, the which form you shall use twice or thrise, ever boyling or sunning of them till the juice be consumed. This oile is good for heat, inflamation, staieth fluxions, strengtheneth and thickeneth the parts where it is put.

Oleum Violarum.

This oile is made of oile Omphacine, or oile of Almonds, by putting in it fresh purple Violets in a vessell of glasse, well covered and put in the Sunn twelve daies, changing the Violets every third day, in the end put in dry Violets. It hath the like vertue as the former.

Oleum Nymphæa.

Oleum Nymphæa, is made by putting the white flower of water Lillies, well macerate & washed in oile, and set in the Sunn the space of 20 daies or longer, changing the Lillies every five daies once. This oile doth more refrigerate than any of the former. It pacifieth the heat of the kidneys, head, and bladder, procureth sleep. The oile of Pupu and Juquiami, are of the same nature, and are made after the same form, but are better if they be made by expression as you have heard.

Oleum

Oleum Cydoniorum.

Rec. Cydoniorum cum cortice & semine tusorum, succi cydoniorum, an. lib. ſs. Mingle them in a veſſell of glaſſe with a pound and an half of oleum omphacinum, ſet them in the Sunn the ſpace of twentie daies, then boile them for an hour in a double veſſell ſtrained, and put in freſh the ſecond and third time, and boile as the former, then ſtrain it and kæp it for your uſe. It it hath the vertue to binde, and is very cooling, good for the Stomack, Liver, and Intrals: it reſtraineth vomiting.

Oleum Maſticinum.

Rec. Maſtichis unc. 4 viri optimi unc. 4. olei omphacini or roſacei, lib. 2. boile them in a double veſſell to the conſumption of the wine. It hath the vertue to corroborate the brain, ſinewes, Liver, and Stomack. It is good for vomiting and lientery.

Oleum Camemellinum.

Rec. Florum Camomell recentium & tuſorum lib. 1. Macerate and inſuſe them in ſwæt oile in a glaſſe in the Sunn, the ſpace of twenty daies, then ſtrain it and kæp it for your uſe. It hath the vertue to aſſwage pain, corroborate the ſinewes and membrains.

Oleum Liliorum.

Rec Florum Liliorum alborum integrorum, lib. 1. macerate them in ſwæt oile, & ſet them in the Sunn the ſpace of twentie daies, then ſtrain it and kæp it for your uſe. It hath the vertue to aſſwage the pain of the ſtomack, breaſt, belly, kidneys, and bladder.

Oleum Anetinum.

This oile is made of læs of Anetide or Dil, macerate and bruſed in a ſufficient quantitie of ſwæt oile, and ſet in the ſun five or ſix daies, or boiled in a double veſſell, ſtrain it and kæp it for your uſe. It hath the vertue to heat geſt and aſſage the pain of the head, ſinewes, and procureth ſlæp.

Oleum

Oleum Lumbricorum.

Rec. Lumbricorum terreſtrium, lotorum, & preparatorum lib. ſ. Vini albi, un. 2. olei dulcis lib. 2. boile them to the conſumption of the wine and waſting of the wormes, then ſtrain it and reſerve it to your uſe. It hath the vertue to aſſwage pain, doth ſoften with a moderate heat, very good for kniſing and pain in the joints.

Oleum è Caſtoreo.

Rec. Caſtorei in aqua vitæ ſoluti, un. 1. olei lib. 9. boile them in a double veſſell untill the third part be conſumed. It is good againſt diſeaſes of the nerves, deafneſſe, noiſe of the eares, and coldneſſe of fevers.

¶ Of Unguents.

UNgunts are ſo called, becauſe they doe annoint the parts where they are applyed, and are of more thick and ſolide conſiſtence, than oiles. The matter wherof unguents are made, are of parts of plants, and divers parts of Beaſts: alſo of Pettals and thinn Juices, the which are conſumed by boiling, as you have heard in oiles. Sometime there doth enter into unguents dryе hearbs, which muſt be put in fine powder, and mingled with the reſt, as you have heard of Pettals. All Unguents are made either by fire or long working, as the Unguent of Litharge called Nutricum, Unguentum aureum called regis.

Rec. Ceræ Citrinæ unc. 6. olei lib. 2. ſ. Terebinthinæ unc. 2. Reſinæ pinæ & calophoniæ, an. unc. 1. ſ. Thuris, Maſticis, croci, drag. 1. The Ware muſt be melted with the oile, then put in the Terebintine and powders, being finely bruſed.

Unguentum refrigerans Galeni.

Rec. Ceræ albæ unc. 8. olei roſati lib. 1. Melt them on the fire, and let it cool. After that beat and waſh it long with cold water, thereafter with vinegar or Roſe-water.

It

It is very cooling, good for Phlegmons, Herefipelas, and all hot tumors.

Unguentum album.

Rec. Ceruſſæ unc. 4. litargyri drag. 2. Lay them a good ſpace in Roſewater, then put them in a mortar, and by little and little powre in ſo much Roſe-oyle as they can drink up, continually ſtirring and tempering them till ſuch time that they appeare in forme of an Unguent, adding thereunto a little white Vinegar with ſome Camphere. It is cooling, aſſwageth pain & inflamation, and is good for heat, ſcabs, itch, and all out-breaking.

Unguentum diapompholigos.

℞ *Rec.* Olei roſacei unc. 5. ſucci ſolani unc. 7. bulliant ad ſuccei conſumptionem, deinde adde ceræ albæ unc. 2. *ſs.* Ceruſſæ lotæ unc. *ſs.* plumbi uſti loti pompholigis, thuris an. unc. *ſs.* coquantur in formam unguenti. This Unguent is cooling, dryeth and filleth up hollow ulcers and wounds, bringeth malignant ulcers to eſcharre.

Unguentum roſumpivum.

Rec. Seminis lini, althææ, & fenugreci, Gummi arabici, dragagunthæ, an. drag. 2. macerentur & bulliant in lib. *ſs.* aquæ roſarum. Then ſtraine out the muſſlages, and diſſolve in the reſt adipis ſuillæ, gallinæ, anſeris, anatis, an. unc. 2. aſopi unc. *ſs.* olei violarum, Camomilini, Amygdalarum dulcium, an. unc. 2, medulla vituli, butyri recentis, ceræ albæ an. lib. *ſs.* coquantur, & fiat unguentum. It hath the vertue to moliſie without great heat.

Unguentum Baſilicum, or Tetrapharmacum.

Rec. Reſinæ picis, ceræ an. lib. *ſs.* olei quantum ſufficit. It hath the vertue to heat, humect, and mitigate the paine.

Unguentum aureum.

Rec. Ceræ citrinæ unc. 6. olei dulcis lib. 2. *ſs.* Terebinthini unc. 2 reſinæ colophoniæ an. unc. 1 *ſs.* Thuris, maſticis an. unc. 1. croci drag. 1. You muſt melt the Ware with the oyle, then put in the other ingredients, which being all melted, put in the Terebintine, and take it from the fire,

fire, kæp it foꝛ your uſe. It hath the vertue to cleanſe, fill up, and agglutinate wounds.

Unguentum Ægyptiacum.

Rec. Æruginis drag. 2. Mellis optimi, unc. 1. *ſi.* Aceti fortis drag. 10. Seeth al theſe on the fire till ſuch time as it become thick & of purple colour. It hath ꝑ vertue to cleanſe mightily fiſtules & old ulcers, eateth & conſumeth dead fleſh.

Unguentum Apoſtolorum.

Rec. Terebintinæ, cetæ albæ, amoniaci, an. drag. 14. Floris æris, opopanacis an. drag. 2. Ariſtolochiæ rotundæ, Thuris, maſtichis, bdellii an. drag. 6. Myrrhæ & Galbani an. drag. 4. litargyri unc. 9. olei lib. 2. Si æſtas fuerit, hyems vero lib. 3. You muſt macerate the bdellium, amoniack, opopanax, galbanum in ſtroug Vinegar, and diſſolve with the other ſimples in the Oyle and Ware, and boyle it to the foꝛme of an unguent. It hath the vertue to cleanſe wounds and Ulcers, conſumeth ſpungious and dead fleſh, and ꝓcureth new againe. It is called *Apoſtolorum*, becauſe it is made of twelve ſimples, which was the number of the 12 Apoſtles. Yet I finde in Nicholas Alexandrine an *Emplaſtrum* called *Apoſtolicum*, in the which enters one and twentie ſimples.

Unguentum Æunulatum.

Rec. Radicis æunulæ, exaceto, coctæ, tuſæ, & cretæ lib. 1. axungia porci, olei an unc. 4. cetæ novæ unc. 1, argenti vivi bene extincti, terebintinæ loti an. unc. 2. ſalis bene triti unc. *ſi.* You muſt firſt ignifie the Ware and greaſe with the oyle, then put to the Æunula, thereafter the Quick ſilver, Salt, and Terebintine. It is good foꝛ itch and ſcabs of any ſoꝛt, and againſt any filthineſſe of the ſkinne.

¶ Of Emplaſters.

EMplaſter is a Medicament which is applyed to divers parts of our body foꝛ ſundry cauſes. It is of conſiſtence hard

hard and ſolid, compoſed almoſt of all ſorts of ſimple medicaments, chiefly ſuch as are greaſie and oily, in it doth enter all parts of plants, mettallick ſimples, and terreſtrious, with divers parts of beaſts, ſometimes whole quick beaſts: of theſe ingredients ſome doe only loſe their vertue and facultie, like as wine Vinegar, with all other thinn iſſues, all which are conſumed in the boiling, before the plaſter be brought to perfect conſiſtence.

Emplaſtrum diachylum ſimplex.

Rec. Mucilaginum ſeminis fenugreci, & lini radicum, althex an lib. 1. olei veteris lib. 2. litargyri triti lib. 1. *ſi.* You muſt firſt diſſolve the Litarge in a morter with oyl by little and little till they be well mixed, then boile them at a ſoft fire, ſtirring them ever about with a ſpill of wood till they become thick, then put in the muſtlages and boile them to the conſiſtence of an emplaſter. It hath the vertue to ſoften hard tumors of all externall parts, as alſo the liver and ſpleen being hard and ſchirrous.

Emplaſtrum diachylum magnum.

Rec. Litargyri triti unc. 12. olei Irini, camomelini & anetini an. unc. 8. Mucilaginum ſeminis fenugraeci, & lini radic. althex, ficum, pinguium, uvarum paſſarum, ſucci iridis, & ſcyllæ, æſopi, Ethyopidis, an. drag. 12. *ſi.* Terebinthinæ unc. 3. reſinæ pini, ceræ citrinæ, an. unc. 2. You ſhall mixe all theſe, and make them in the conſiſtence of an emplaſter as the former. It hath a great mollifying vertue.

Emplaſtrum diacalcitheos, or palmetum.

Rec. Adipis ſuillæ recentis ſine ſale, & fibris, lib. 2. olei veteris litargyri triti an. lib. 3. calcithidos levigatæ unc. 4. The greaſe and oyle muſt be boiled at a ſlow fire, then put in the Litarge and Vitriol, ſtirre it continually with three green boughs, Mirti, Sorbi, or Meſpelum, and when it is come to the thicknes of a cerate, the tender boughs muſt be cut in peeces, and put in by little and little, then boile it to the conſiſtence of a plaſter. It hath the vertue to ſtay fluxions, it doth reſolve and agglutinate ulcers and wounds.

Emplaſtrum

Emplaſtrum è Muſſlaginibus.

Rec. Muccilaginum ſeminis lini, althæ, fenugræci, mediani, & corticis ulni an. unc. 4. *ſs.* olei camomillini, liliorum & aneti an. unc. 1. amoniaci, galbani, opopanacis, ſagapini an. unc. *ſs.* croci drag. 2. Terebintinæ unc. 2. ceræ novæ drag. 20. Of all theſe you ſhall make an emplaſter as the former. It hath a mighty vertue to molliſie and digeſt hard tumors; it is a maturative, ſo is applied upon tumors to procure matter.

Emplaſtrum è Baccis Lauri.

Rec. Thuris, Maſtichis, myrrhæ an. unc 1. baccarum lauri, unc. 2. ciperi coſti, an. unc. *ſs.* Mellis colati quantum ſufficit. Some doe add to theſe ingredients a little Goats dung well dryed. This plaſter hath the vertue to paciſie pain, chiefly of the ſtomack, inteſtines, womb, and other parts, chiefly when the cauſe doth proceed of cold or wind.

Emplaſtrum oxicroceum.

Rec. Picis Navalis, ceræ, croci, colophoniæ an. unc. 4. Terebintinæ, amoniaci, galbani, myrrhæ, Thuris, maſticis an. unc. 1. & drag. 3. The Galbanum and Ammoniack, muſt be liquified one night in Vinegar, then melted on the fire, paſſed and boiled again till one part be conſumed, then put to the Pitch, which being melted put it to the Wax, and being liquified, you ſhall add the Turpentine and Colophon, thereafter put to the Maſtick, Incenſe, and Myrrhe, ſtirring it ever with the ſpill till it be boiled, then caſt it in cold water, thereafter expreſſe it well with your hands, put it on a Marble ſtone rubbed with oyl, and a little powder of Saffron, thereafter form Pagdations or little roles. It hath the vertue to molliſie, aſſwageth the pain of the joints, and membrains that cover the bones.

Emplaſtrum de Janua.

Rec. Succorum apii, plantaginis, & betonicæ, ceræ, picis, reſinæ, Terebintinæ, an. lib. *ſs.* Of the which you ſhall form your plaſter in this manner; ſeeth the 3 ſimples in juices at a ſoaking fire, ſtirre them over till the juices be conſumed, then

then put to the Terebintine, and give it little ſething, then remove it from the fire, and form the roles. It is good for wounds of the head, it doth mundifie, incarnate, agglutinate, cicatrize, and pacifieth inflamation.

Emplaſtrum gratia Dei.

Rec. Terebintinæ lib. ſs. Reſinæ lib. 1. Ceræ albæ unc. 4. Maſticis unc. 1. Betonicæ, Vebenæ, Pimpinellæ an. M. 1. The hearbs muſt be bruiſed and boiled in white wine, till the third part be conſumed, then ſtrain out the liquor. In the which put the Ware, Rozine, and Maſtick, and boile till it come to the conſiſtence of a plaſter, then take it from the fire and put to the Terebintine, remove it well, then form your plaſter.

Emplaſtrum divinum.

Rec. Galbani, Myrrhæ an. unc. 1. & drag. 2. Amoniaci unc. 3. & drag. 3. opopanatis, maſtichis, Ariſtolochiæ longæ, æruginis an. unc. 1. Litargyri, olei communis, an. lib. ſs. ceræ novæ unc. 8. Thuris unc. 1. & drag. 1. bdellii unc. 2. Magnetis unc. 3. The Litarge muſt be mingled with the oile by ſtirring of it, thereafter boile it till it become ſomewhat thick, then add the Ware it being cut in ſmall peices, the which being liquified is taken off the fire, then is put to the Galbanum, Amoniacum, Opopanax, and Bdellium, diſſolved in Vinegar and wine, then boile it and ſtrain it; thereafter put the powders, Myrrhe, Maſtichis, thuris, ariſtolochiæ rotundæ, magnetis; then ſprinckle it with fine powder of Æruginis. This plaſter is good for tumors with corruption of the bones and maligne Ulcers. It conſumeth corruption, and ingendereth new fleſh.

Deo laus, honor, & gloria in ſempiternum.

Candido Lectori.

CAndide Lector, quiſq; ex hoc libello fructum perceperis, bene precare D. *Jacobo Hamiltonio, Abircorniæ* Comiti, in cujus, ac Reipub. gratiam conſcripſi.

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FINIS.

THE PRESAGES OF Divine *Hippocrates*.

Divided into three parts. VVith the Proteſtation or Oath which *Hippocrates* cauſed his Schollars to make at their entry with him to their Studies.

The Whole Collected and Tranſlated by *Peter Lowe* Scottiſh-man, Doctor in the Facultie of Chyrurgery in *Paris*.

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To the Reverend Father in God *John*, by the permission of God Arch-bishop of *Glasgow*; *Peter Low* wisheth the accomplishment of all perfect honor and felicitie.

When I had collected and turned into our vulgar language, This little work (Right Honorable;) I considered with my selfe, that in ancient time, and also in this our Age, men have ever accustomed to dedicate their travels unto such vertuous Personages as they have honoured: and I examining my selfe, unto whom I might addresse this Treatise of the Presages, I thought good to offer and present the same in all humilitie to your Honour: It being the Work of Hippocrates *the Paragon of Physitians, and your Lordship the patterne of learning, the patron of learned men, the fittest to judge of their workes. For I must confesse it, ever since it pleased God to place your Lo: in your Ecclesiasticall eminencie above us in this Citie, I have ever been inclined to testifie my affection to your Ho: by my humblest endevours: But having nothing in my power, but my simple desires; my hands being too short to come to solide effects, I give this publique testimonie to the world of my inward disposition, and consecrate my selfe and my labours to your Lordships most Honorable Patronage. Your Honors pietie in Religion, prudencie in policie, knowledge in all sciences,* (Quoniam nomine religiosissime, prudentissimo, & eruditissimo Principi acceptissimus es) *and gravely tempered with affabilitie in civil conversation, shal protect me from* Momus *malicious envie, procure me the favour of good men, incourage me to undertake further paine: for the publique utilitie, oblige me more and more to your Honors service, and wish your Lordship all contentment, prosperitie, and long life, long to rule in Gods Church, governe the Common-Wealth, and better the estate of all those that be subject to your Honors authoritie. I humbly take my leave from mine own house in* Glasgow, *the* 7. *day of* November, 1611.

Your L. most dutifull to
command, *Peter Lowe*.

The

The life of HIPPOCRATES.

Hippocrates was the ſonne of *Heraclides*, as *Galen* doth affirme in the firſt Book of Regiment of hot Fevers, but as others ſay, the ſonne of *Eſclepius*, he was bred and born in the Iſle of *Cos*, his Maſter and Inſtructor was the great *Pythagoras*. His naturall inclination was towards good, for he hated, loathed, and abhorred all pompe and worldly pleaſures and veneriall luſts. He conſtrained alſo his Scholliars by an oath to be ſilent and keep taciturnitie, modeſtie, affabilitie, and humilitie, as well in manners, as in apparell. S. *Hierome* teſtifieth that he reſtored the ſcience of Phyſick being almoſt loſt five hundred yeares, viz. ſince the time of *Eſculapius*. He was little in body and ſtature, but faire and exceeding well favoured: he had a good and ſtrong head: he went ſlowly and ſoftly: he was very penſive and of few words: he was no great eater, nor glutton: he lived 95. yeares: he uſed oftentimes this ſentence; *He that will live in libertie, let him not deſire that which he cannot obtain, and he who would have that which he deſireth and coveteth, let him deſire nothing but that which he may obtain.* Furthermore, he who would live peaceably in this mortall life, let him conforme himſelf to him who is invited to a feaſt, who giveth thanks for all which is layd before him, and grudgeth not at any thing which is omitted. He lived in the time of *Eliachim*, *Malachias*, *Pereno*, and *Socrates*.

His Maſter was *Pythagoras*.

He reſtored Phyſick, long loſt.

Hippocrates Proverb.

The

¶ The Proteſtation and Oath of divine *Hippocrates*.

I *Hippocrates* doe vow, promiſe and proteſt to the great God *Apollo* and his two Daughters *Higine* and *Panadie*, and alſo to all the gods and goddeſſes, to obſerve the contents of this oath, or tables wherein this Oath is carved, written or ingraved, ſo farre at I can poſſible, and ſo farre as my wit or underſtanding ſhall be able to direct me, viz. that I yeeld my ſelf tributarie and debtor to the Maſter and Doctor who hath inſtructed me and ſhewed mee this ſcience and doctrine, even as much or rather more than to my Father who hath begotten me, and that I ſhall live and communicate with him and follow him in all neceſſities which I ſhall know him to have, ſo farre as my power ſhall permit, and my goods ſhall extend. Alſo that I ſhall love and cheriſh his children as my brothers, and his progenie as mine own. Further, that I ſhall teach, ſhew, and demonſtrate the ſaid ſcience (gratis) without reward or covenant, and that I ſhall give all the Cannons, rules, and precepts, freely, truly, and faithfully to my Maſter his children, as to mine own, without hiding or concealing any thing, and to all other Schollars who ſhall make the ſame oath or proteſtation, and to no others. Alſo that in practiſing and uſing my ſcience towards the ſick, I ſhall uſe only things neceſſary, ſo farre as I am able, and as my ſpirit and good underſtanding ſhall give unto me, and that I ſhall cure the ſick as ſpeedily as I may, without dilating or prolonging the Maladie. And that I ſhall not doe any thing againſt equitie, for hatred, anger, envie, or malice, to any perſon whatſoever: Moreover,

Tributarie to his Maſter.

Love his Maſters Children.

Not to miniſter poyſon.

ver, that I ſhall miniſter no poyſon, neither councell nor teach poyſon, nor the compoſing thereof, to any: Alſo, that I ſhall not give, nor cauſe to be given, nor conſent that any thing be

To give nothing to women, to cauſe abortment.

applyed to a woman breeding or bigge with childe, to deſtroy, or make her voide her fruit. But I proteſt to keep my Life and Science purely, ſincerely, and inviolably, without deceipt, fraude, or guile. And that I ſhall not cut, nor inciſe any perſon having the ſtone, but ſhall leave the ſame to thoſe that are expert in it: and furthermore, I ſhall not enter into the Patients houſe, but with purpoſe to heal him: and that I ſhall patiently

To bear with the ſick.

ſuſtaine the injuries, reproaches, and loathſomneſſe of ſick men, and all other baſe raylings: and that I ſhall eſchew as much as I may, all venerious laſciviouſneſſe. Moreover, I proteſt, be it man, woman, or ſervant, who is my patient, to cure them of all things that I may ſee or hear either in minde or mannners, and I ſhall not bewray that which ſhould be concealed and hidden, but keep inviolable, with ſilence, neither reveale any creature, under paine of death. And therefore I beſeech our Gods, that obſerving this Proteſtation, promiſe and vow intirely and invioably, that all things in my life, in my Art and Science, may ſucceed ſecurely, healthfully, and proſperouſly to me, and in the end eternall glory. And to him that ſhall violate, tranſgreſſe, or become perjured, that the contrary may happen unto him, viz. miſery, calamitie, and continuall maladies.

Heer *Hippocrates* ſheweth that the place of the bleſſed is eternall, & the pain of the wicked infinite.

The end of the Proteſtation.

The first Book of the Presages of divine HIPPOCRATES, called Prenotionum.

The Preface.

ANy Physitian or Chyrurgion daring to purchase glory and honour, the love of the people, and some wealth by his Science, ought to shew himselfe skilfull and expert, and that by declaring to the Patients the signes past, present, and future, of their Maladies, & shewing the things over-past by the sick men, and advertising or reducing to their memorie, things forgotten: which the sick persons knowing, will the more confidently commit themselves to their hands, presuming and thinking that he hath a generall knowledge of all Maladies, and that they shall bee speedily cured, the which is true. For having such knowledge of things past, present, and future, he may more easily help the Maladies, although it be impossible to any Medicine Chyrurgion to cure and heale all diseases: for that should be a greater thing, than to foretell the future accidents. For it sometimes happeneth that the sick die by the violence or malignetie of the Maladie, before the Physitian be called: some dye shortly after the Physitian Chyrurgion is arrived, the same day: also one or two dayes after, before that by his science and diligence he may correct and take away the perill and dangerous accidents. Therefore he ought to endeavour, and enforce himself to know the nature of such sickneſſe, also the strength of the sick, to the end he may avoyde defamations, opprobrious speeches and reproaches, the

The Physitian should be skilfull.

the which doing, he ſhall make himſelf admirable, and more divine than humane, preſaging death to one, and health to another; having likwiſe regard to the qualitie, goodneſſe, and malignitie of the ayre, which circumvirons the ſick, as the univerſall ayre, the times, and qualities of the yeare alſo the good and evill aſpects of celeſtiall bodies, which foreſeeing, he ſhall eſchew diſhonor, and ſhall get renowne and friends in all his actions.

Death to one. Health to another.

¶ How the Phyſitian or Chyrurgion may preſage by ſignes of the Face, in ſickneſſe.

NOw to foretell, foreſee, or preſage well by the ſignes in dangerous and vehement Maladies; It is requiſite to conſider and contemplate the Face of the ſick. Firſt to know if it be ſuch as in health, or but a little different: and if it be ſo, the Medicine Chirurgion may have a good preſagement and hope of Recoverie. But if it be greatly altered, and changed, as followeth, hee ſhall eſteeme it in perill and danger of death, when the noſe and noſtrills are extenuated and ſharpened by the ſame Maladie, and the eyes hollow, and the temples, viz. the parts betwéene the eares and forehead are cleane, and the skinne of the brow is hard, dry, and looſe, and the eares cold and ſhronke, or almoſt doubled, and all the face appeareth black, pale, livide, or leaden, and greatly deformed, in reſpect of that which it was in time of health. When theſe things before mentioned appeare in the Face, or the moſt part of them. In the beginning or firſt dayes of the Maladie, he muſt enquire if he cannet know by any other token) if it happen not by watching too much, or that the Patient hath not had time or opportunitie to ſléepe, or if he hath had a naturall flux of the belly, or if the ſaid things have happened by famine: for if it be ſo, he ought not to feare danger. On the contrarie, if the Face appeare ſuch and continue, and the Patient

To contemplate the face.

Alteration of the face, eyes, and temples.

Opportunitie of ſleepe.

tient saith, that the said things doe proceed of watching, leanes of body, nor by fasting, the Phisition may assuredly presage death approaching; and if the Malady hath already continued three or four daies, after (having considered that as is above mentioned) it behoveth him to contemplate by other signes, as by the eyes, lipps, hands, and other parts of the body.

To presage by the signes of the *Eyes*, and *Lipps*, in sickenesse.

Evill signes of the Eyes.

IF the Eyes cannot see the day or light, and weep or powre out teares against nature, and against the Patients will: Also when it seemeth that they are like to fall out of the head, or that the one is evidently grown lesse or diminished, or that the white of the eyes is red, and the vains appear red, or livide, or that they are bleared or dimm, or trembling and very moveable, or deep and sunck in: also when the sick becometh squint eyed and looketh overthwart, with a terrible and obscure look, and hath the visage all disfigured and fearfull: all these signes are pernicious and mortall. Also when the Patient sleepeth with his eyes half open (and doth not so by custome) and the white of the eye shew it self, the eye-lids being only closed, if this happen not by the figure of the body, nor by laxative Medicines, it is a signe of death. Also when the eye-lids, the lips, and nose seem to be crooked and drawn awry, also mortified and livid: these signes with the proceedings, foretell death to the sick. Likewise when the lipps are lean, hanging down cold and pale, against the nature of the sick, the Phisition may presage and prognosticate death to approach.

Mortall signes of the visage.

To presage by the manner of *Lying* and *Reposing in sickenesse*.

As for lying, it is a very good ſigne when the Patient repoſeth and reſteth on the right ſide, or left, at his eaſe, having his hands upon his ſtomack or elſewhere, not being ſtiffe of his legs, but flexible, and to repoſe as in health, is beſt. For to ly with neck, hands and feete ſtiffly extended and unflexible is an evill ſigne. Likewiſe when the ſick turneth, wrings and toſſeth up & down oftentimes, with ſtarting either in ſleep, or waking, and making the beds feet where the head ſhould be, caſting himſelfe downe, not knowing what he doth, is an evill ſigne. Alſo if he often uncover himſelfe, having no great heat in the extremities, and that he caſteth forth his armes, leggs, feet and head, ſometime on this ſide, ſometime on that, it is a ſigne that he is in great anguiſh and diſtreſſe. Alſo it is a pernicious ſign to ſleep with the mouth open, contrary to nature. Likewiſe to ſleep with the face upward, having the legs enterlaced, and folded together as it were rotds, and that by the force and violence of the Malady, is a bad ſigne, or when they are much enlarged againſt reaſon. Likewiſe he that ſleepeth contrarie to nature and cuſtome, with the belly downward laid cloſe to the bed, ſheweth and ſignifieth confuſion and alienation of ſenſes, or great rage & dolor of the belly. Alſo whoſoever in the day of Criticatiom, and force of the Malady, conſtraines and forceth himſelf to riſe, and ſit upright, and is impatient, puts himſelf in danger, and it is an evill ſigne in all vehement and great Maladies, but worſe in pulmonick paſſions.

Stiffnes of the legs.

Evill ſignes

To ſleep with open mouth.

To preſage by the *Teeth*, in ſickneſſe.

When one gnaſheth the teeth (not as a man that hath extream cold, but with colliſion in the Fever, and hath not had it naturally, nor by cuſtome, it ſignifieth trembling of the ſpirit, and conſequently death, and if he be ſhortly after void of reaſon and alienated, it ſignifieth death approaching

To

To preſage of *Death* by any Ulcer.

IF there happen to the ſick perſon any Ulcer, Anthrax or Carbuncle, whether it goe before the Paladie, or come with the Paladie: if the Ulcer dry up, and become either green livid, or black, and you perceive the ſick to grow worſe, you may prognoſticate death enſuing.

To preſage by the *Hands*, in ſickneſſe.

WHen any Patient is ſick of the hot or burning Fever, or in the Paladie of the lungs, called Peripneumonia, or of baſtard frenzie, and not perfect, or of great dolor of the head, and ſeeks here and there, about, below, and upon the bed, threads, haires, of the face, alſo feathers, or filth of the coverings, ſtraw, reſhes, and other things, and thinks to take hold of the ſeeling and wals, the which are all mortall ſignes moſt commonly.

To preſage by *Breath* or *Reſpiration*, in Fevers.

THe Breath or Reſpiration, ſignifieth often dolors or inflamations, or burning heat in the vitall members, as in the heart and lights, but when it is great and rare, ſo that there is any long ſpace betwixt the Reſpiration, it ſignifieth alienation of underſtanding and reaſon. And when the breath iſſueth out of the mouth and noſthrils very cold, it foreteis great perill of death. But gentle Reſpiration in any hot Paladie being joined and accompanied with a Fever, is a ſigne of health in thoſe that doe end in forties daies.

To Prognoſticate by *Sweat*, in Fevers.

THe healthfull, commendable, and good Sweat in all hot Paladies, is that which happeneth in the day of Critication and Judgement, and cheifly when it is univerſall & the Patient finds himſelf thereby eaſed and ſtrengthned. And if it happen not in the ſame day and be not univerſall it is no good ſigne. For the mortall Sweat is particular and cold, as in the forehead, in the head or face only, and this

Sweating is healthfull in the Critick day.

the burning Fever and other Palavies declareth continuance of the Palavie.

To presage of the *Right side* and *Left in Fevers.*

When the Patient feels not any dolour, tumor, hardnesse, or inflamation upon the Ribbs, it is a very good signe, and when the one side is as soft as the other, without dolour. But if there be dolour, tumor, hardnesse, or inflamation on both sides, or on the one more than the other, it is an evill signe. For if he feel great motion or pulsation in one of his sides, hee may prognosticate great distresse and dolour, or alienation and confusion of Reason. If with this pulsation the eyes be very moveable, the Patient is in danger of a Frensie and to be frantick, or to destroy himself.

To presage by signes of Tumors or Apostumes under the sides.

The Collection of Apostume in a burning Palavy under both the sides with tumor and dolour, is more dangerous than under one of the sides only, and chiefly lesse dangerous under the left side than under the right: and if the Patient die not in the first daies, and if it continue twentie daies and the Fever cease not, nor the Apostume diminish, it is a signe it shall come to maturation; and if it happen on the seventh day with the flux of blood at the nose, it easeth much, and the Patient may prognosticate when the Patient saith that he hath pain in the head or forehead, and that his eies are dimm or obscure, chiefly when the Patient doth not exceed 30. or 35. yeers of age. And when the Collection or Apostume is soft and without dolour, and moveth or varieth when it is handled, it requireth longer time to be cured, than the precedent, but it is not so dangerous. And if it continue sixtie daies, and

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the Feuer ceaſe not, neither the tumor diminiſh, it ſhall come to maturation and purgation; you ſhall prognoſticate ſo much of Apoſtumes in the belly: ꝑ Appoſtume then being hard, great, and with dolour, is dangerous and mortall: The ſoft without dolour and dolable from one place to another, is of longer continuance, but without compariſon leſſe dangerous.

To preſage of *Apoſtumes* in the bottome of the *Belly in Feuers.*

THe Apoſtumes of ꝑ Belly doe never become ſo great, as thoſe that breed under the Midriffe, and yet they are leſſe which ingender unto the Navill, and moſt commonly they come to ſuppuration or putrefaction: It is a good ſigne when they purge by flux of blood at the noſtrils from the part of the Apoſtume: alſo all ſuch Apoſtumes by lapſe of time, and in the end may come to putrefaction and purgation. It is then convenient to conſider that the forenamed Collections of Apoſtumes come by divers meanes to putrefaction or purgation, for ſome purge altogether outwardly, and are little, round, and ſharpe or pointed, they are moſt healthfull and leaſt mortall: The large, groſſe, and flat, ſpacious and not round nor ſharpe, are dangerous: and thoſe which breake & purge within the belly, although they make ſome tumors outwardly, are more pernicious and dangerous, than thoſe which make no eminence outwardly, and which have not the skinne diſcoloured.

To preſage what the matter ought to be that iſſueth out of *Apoſtumes.*

THe Corruption & matter which commeth out of Apoſtumes altogether white, and not unſavorie, is good and healthfull: that which is otherwiſe, how much the more it differs from white, ſo much the more is vitious and bad,

The end of the firſt Booke.

¶ The ſecond Book of the Preſages of *Hippocrates*; and firſt of *Hydropſie* in Fevers.

ALL manner of *Hydropſie* with the hot fever, is dangerous and mortall: For when the Patient is moleſted and afflicted by any vehement fever & grievous colour, then he dyeth. This Maladie often proceedeth of the Hepatick paſſion, which is the Maladie of the Liver: It happeneth alſo by paſſions in the Guts, Inteſtines, and Entrailes, Meſeraick Vaines or Spell, and other inferiour parts: That which comes by the Entrailes or Meſeraick vaines and other parts, is known by Inflation in the feet, and by long and continuall ſtay of the body, albeit the colour of the belly is not mitigated nor appaſed, nor the belly diminiſhes nor growes leſſe. That which proceeds of the Liver is known by the ſignes following, viz. the Patient hath a dry cough and ſpitteth almoſt nothing, and his belly is hard and bound, in ſuch ſort, that there commeth nothing from it, but with great pain and travell: alſo his feet are ſwollen: Moreover, there are tumors and inflations ſometime on the right ſide, ſometime on the left, then they depart and diſſipate, that is, they goe and returne.

To preſage of the ſignes of *Life* and *Death*. in hot Fevers.

WHen the Patient is cold in the head, hands and feet, and that the ſides and belly are burning and vehement hot, it is a ſigne of an evill and dangerous Maladie.

But

But when the ſick perſon doth eaſily turn himſelfe from one ſide to another without trouble, alſo when all the body is equally hot and ſavourie, it is a ſigne of ſalubritie. On the contrarie ſide, when all the members are heavie, or the armes and legs, or all the body, it is to be feared. And if the Nailes be therewith livid or leaden, one may prognoſticate Death approaching. But if the Nailes, Fingers and Feet, be altogether black, it is not ſo dangerous a ſigne, eſpecially when any other good ſigne doth appeare, as if the Patient feele no great dolour, and beareth it ſtrongly, and endureth his ſickneſſe without anguiſh, albeit that which is black will fall away, and the pimms or leaden will be evacuated by Apoſtume.

To preſage by ſignes taken from the *Genitors*, and *Tarde*, in Feavers.

When the Genitors and Pudd are ſhunke in, and apparently diminiſhed againſt nature, it is a ſigne of great dolour, and preſent death. Evil ſigne.

To preſage by *Sleeping* and *Dreaming* in Feavers.

As for ſleeping and ſlumbring, the one is naturall and healthfull, and the other unnaturall and vicious. The naturall reſt is taken in the night, and waking in the day: And although it is not altogether wholeſome to ſleepe from the breake of the day to 8 or 9 of the cloſk at morning, yet notwithſtanding it is more profitable, than to ſleepe in the reſt of the day: But if one neither ſleepe by night nor day, it is dangerous, and a ſigne of great dolour, of folly, of alienation of ſences, reaſon, and underſtanding, either preſent or future

To preſage by purging of the belly, or fecall excrements, in Fevers.

As for eaſing of the Belly, and evacuating of ſuperfluities and excrements, it is beſt when the ſick perſon followes the cuſtome in Paladies which he did in health, and eſpecially according to the qualitie and quantitie of his dyet. For how much the more it is diſſonant and different, it is ſo much the worſe. The naturall egeſtion ought not to be too liquide or adust, but indifferently proportioned and compounded in colour to the meats, and that the Patient goe to ſtoole without pain or dolour. And if the matter be liquide, it is not altogether to be diſliked when it comes without ventoſitie or violence, and not often in a ſhort time.

Dangerous Accidents. For ſo it would make the perſon weake, debile, froward, and in danger of ſwounding, and death. It is alſo to be allowed about the end of the Paladie, that the egeſtion and excrementall matter become thick and not too dry, and of a good colour, as drawing neare to red and browne, and be

Good ſigne. not very unſavorie. Alſo if there come forth wormes about the end of the ſickneſſe with the excrements, it is a good ſigne Likwiſe in every Paladis the belly ought to be fleſhie and not round, nor full of winde, otherwiſe it is no good ſigne. Furthermore the egeſtion and excrementall matter being liquid and waterie, white, or pale, greatly red or frothy, is dangerous: the mortall is black, and livide, or greene, unſavorie, and ſlimy. And if it be of divers of the fore-named colours together, it is no leſſe dangerous, but of longer continuance: alſo when there is peeling of the guts or Carbuncles and little skin, all ſuch are mortall.

To preſage of Winde in the *Inteſtines*, and *Matrix*.

The ventoſitie and winde incloſed in the Belly, iſſuing gently and voluntarily, without making noyſe

or

or ſound, and without ſtraining or forcing the Fundament and inferiour parts, is the beſt and moſt wholeſome. That which cometh forth unconſtrained, making a noyſe, is better than to retain it. But if it goeth out with ſound and noiſe againſt the Patients will, it ſignifieth dolorous tor-tion in the belly, or alienation and confuſion of reaſon.

To preſage of *Ventoſitie* cauſing Inflation.

The dolours recent in the belly by Inflation and tumor, and the Inflation by burning, and heat, making noiſe, rumbling, and motion in the belly, are cured eſpecially by the benefit of the belly, or by expulſion of winde downward, or by Urine, or if they change the place and deſcend downward.

To preſage by the *Urine*, in Fevers.

The Urine that is healthfull in every Maladie, ought to have the Reſidence in the bottome white or piramidall, having the figure of a pear or little fine apple, a good token, being ſick, then it ſignifieth brevitie of the ſickneſſe, and the more that it perſevereth, the more it is to be allowed and ſure. And if ſometime & for certain dates in the Maladie it be ſuch, and in ſome dates without Reſidence, it ſignifieth malitie of ſickneſs and leſſe ſecuritie, and the more it differs from the firſt, the worſe it is. The Urine being red or high coloured with the Hypoſtaſie, or light and equall reſidence, ſignifieth the Maladie to be longer then the precedent where there is no Hypoſtaſie, but leſſe dangerous. Alſo when there is groſſe Reſolutions, as bran or duſt in the bottome of the Urine, it is an evill ſigne, and worſe where they are like ſcales of fiſh. The Urine white and ſubtile, is exceeding bad, albeit the forementioned is worſe where there is groſſe reſolutions. The cloud hanging in the Urine, ſignifieth ſecuritie if it be white, for the black is dangerous; Evill ſigne.

gerous; Moreover, the Urine being yellow and very clear and ſubtill in the Palate, ſheweth continuitie of ſickneſſe, groſſe in digeſtion and crudities. Therefore it is to be feared leaſt the ſick perſon decay before the humors come to perfect concoction, and leaſt the Patient dye. The Urine ſignificative of certain death and unfallible is unſavourie, ſlimy and muddy, as dirt and myre, and is tauny, brown, black, and thick. Furthermore, the black as well in man as woman is alwaies bad: and the ſubtle and the clear as water, is alſo mortall in little children. The Urine being raw, clear, and undigeſted, perſevering ſo long in the malade without other evill ſignes, but with good and healthfull, ſheweth a future Apoſtume lower than the Diaphragme or Ribbs: The Urine having as it were a cob-web ſwimming above, ſignifieth that the perſon ſhall dye. Dry and thick it ſheweth conſumption of the body: you muſt alſo conſider the place and colour of the cloud, for if it be nær the bottome of the Urine, it is a good ſigne, having the colour nær unto white. And if it be ſwimming above, and the top black, it is dangerous, and uncertain. Finally, as for the Judgment of Urines, take hæd above all, that you be not deceived by the Bladder: For they may appear ſuch by the diſeaſes of it: And if the Bladder be not diſeaſed, thy judgment ſhall be certain, therefore take hæd.

Sure ſigne of Death.

Mortall ſignes in children.

To preſage of *Vomiting*, good and bad in Fevers.

Mortall ſigne in vomiting.

Alſo for Womiting, the moſt healthfull and allowable is compoſed of phlegme and choller, not too thick or too viſcous nor ſuperfluous: the chollerick or phlegmatick only, is viſcous, the vomiting being græn, livide, or black, is dangerous, and if it be compounded of græne, livid, and black altogether, it is mortall. Likewiſe, if it be unſavourie, with one of theſe forenamed colours, it ſignifieth death approaching: For the Jus is viſcous in all vomiting and every excrement.

To

To preſage by the *Spittle* in Fevers.

As for Spittle, it is ſaid to be commendable in all pulmonick diſeaſes and Maladies under the Ribs when it cometh early in the firſt daies, and beginning after the Maladie without great pain and labour, being of a red colour or mingled with blood and well digeſted not diſcous: But if it come not in the firſt daies, but afterward with a vehement cough, it is no good ſign; alſo the red not being mingled with the healthfull and commendable, is pernicious. The white ſpittle diſcous and knottie is dangerous, but the pure red is worſe. The green and fleſhie giveth notice of a dangerous and bad maladie. The black above all is mortall: moreover, when the matter which ought to be purged by ſpitting, remaineth within the Lights and troubleth the wind-pipe, there is no ſecuritie: The ſpittle alſo being clear or red, ſanguinolent in Apoſthume & pulmonick inflation coming in the beginning of the maladie, promiſeth in the firſt daies ſecuritie and health to the patient. But if ſuch egeſtion continue to the ſeventh day or more, it is ſuſpitious & uncertain. Alſo ſpittle whereby the dolour doth not ceaſe but perſever, is not commendable, but vitious. And although the black as we have ſhewed before is mortall, notwithſtand if the dolour doe thereby ceaſe, it is leſſe dangerous, and more healthfull.

To preſage of *Neeſing* in Fevers.

The Neeſing in all hot Maladies, and other how dangerous ſoever they be (except they proceed of the Lungs) at any time is commendable and profitable. But being with rhume and diſtillation at the noſe in Maladies of the Lungs, whether it cometh in the maladie, or preſently after, it is dangerous.

To

To preſage of *Suppuration* or matter in *Apoſtumes*.

THe dolour above mentioned which ceaſeth not by ſpitting, nor by the benefit of the belly, nor by phlebotomie, nor by laxative Medicines, nor good Regiment, ſignifieth that the Apoſtume cometh to Suppuration and Matter. And when the Apoſtume breaketh and purgeth, the Spittle being cholerick, whether the matter of the Apoſtume come with the Spittle, or iſſueth out after, it is perilous; eſpecially when it cometh and beginneth in the ſeventh day or after, it is to be feared that the Patient ſhall die on the 14 day, if there happen no other healthfull and commendable ſignes.

To preſage by ſignes of good hope and commendable in the foreſaid Maladies and others.

WHen the ſick perſon doth ſtrongly endure the griefe, and if he draw his breath lightly and at eaſe, and breathe eaſily without dolour, and faſl not any pain, but ſpit without difficultie, and remove his whole body and all his members at his pleaſure, without griefe or wearineſſe, and that he hath no exceeding and ſuperfluous heat in him without great thirſt and drineſſe, they be good ſignes: Moreover, if the Urine and excrements in all the conduits are in due quantitie and qualitie, and of a commendable colour and ſubſtance, as the matter fecall, alſo being of good conſiſtence, and not too hard, but as in health: the ſweat univerſall, hot, with eaſe, alſo the ſpittle gentle and commendable, and ſleep in the night, and ſo of others as we have ſpoken, are good ſignes.

To preſage of the ſignes oppoſite of deſpaire.

IF the ſickneſſe be intollerable, and dolour inſupportable, with burning heat, and extream thirſt, continuall cough, diſtreſſe

ſtifneſſe of members, languiſhing, ſhort ſpiration, filthy ſpittle, and unſavorie, Urine of a ſmall quantitie, the matter fecall, livid, liquid, or watery and ſlimie, and often particular ſweat and cold, without reſt of the day or night, the hands, feet, and forehead cold, tolling to and fro, and all other evill ſignes taken in the face: By all which, or many of them, thou ſhalt prognoſticate ſuddain or lingring death, without diſcredit or diſhonor, but ſhalt be in great reputation and eſtimation.

To preſage by the ſignes of the time and day of the Rupture of the *Apoſtume*.

SOme Apoſtumes breake and appeare on the 20 day, others differ unto 40 others to 90 dayes. Therefore to preſage well, thou ſhalt enquire out the firſt day, and the beginning of the Maladie, viz. when the Patient did firſt feele heat and the fever, alſo ſtifneſſe and ſtanding up of the haire, heavineſſe, alſo dolour and pricking: Then thou ſhalt beginne to reckon the dayes, and by this meanes thou mayſt prognoſticate infallibly of the event. Thou ſhalt alſo preſage if there be Apoſtume on the one ſide, or both, by this meanes: Aske the Patient if he feele dolour on the one ſide more than the other, then cauſe him to lie on the ſide which is ſound, and if he feele heavineſſe and ponderoſitie it followeth, that the ſame ſide where the ponderoſitie is, is Apoſtumed, and there is the collection and matter: and if he feele dolour, heat and heavineſſe on both, it will follow, that both ſides are Apoſtumed: Thou ſhalt know the Apoſtume and collection to be ripe and broken, and the matter retained in the part Apoſtumed, when the fever doth not ceaſe, and it is leſſe by day than night, and that the Patients ſweats abundantly, and ceaſeth not to cough, and voydes not almoſt any thing: Likewiſe if his eyes ſink in his head, and cheekes are red, the nails crooks, and the ends and extremities of the fingers turne, and the appetite decayeth.

Difference of Apoſtumes.

decayeth, and the fæt ſwell, and there is almoſt through all the body pimples and puſtules, theſe ſignes doe appeare when the matter and Apoſtume is of long continuance, and are certaine ſignes of future health. Therefore to prognoſticate whether the Apoſtume will breake ſoone or late, conſider that ſpoken of before: for if the cough in the beginning and firſt dayes doe oppreſſe the ſick perſon with dolour and often ſpitting, and egeſtion, with difficultie of breath, you may judge that the Apoſtume will breake within twentie dayes, and if the contrary happen that the ſignes be hindred, the rupture will be prolonged: and as the ſignes be ſtrong or feeble, ſo the ruption is inveterated or ſhortened. And to know if there be perill or danger, or probabilitie of health, conſider the day whereon the Apoſtume breakes, if the fever and thirſt ceaſe, and the appetite returne, and if the fecall matter be ſolide, and if the matter of the Apoſtume be white and equally ſoft, and come forth without dolour and without coughing: theſe things are preſent ſignes of health. Otherwiſe when the fever doth not ceaſe, or preſently returne with great thirſt, without appetite, and the fecall matter be watery, the ſpittle livide, greene, and ſlimy, and in part phlegmatick, thou mayeſt prognoſticate death. And if there happen ſome good ſignes, and ſome bad, compare the one with the other, and diligently adviſe before thou preſage, to the end thou mayeſt avoyd infamie. For ſome die preſently, others are prolonged and then die in the end, others at length returne to their health.

Be well adviſed in prognoſticating

To preſage of *Apoſtumes* that come about the *Eares* in pulmonick paſſions, or diſeaſes of the Lungs.

WHen the Apoſtume happeneth about or under the Eares, of the ſick perſon with difficultie of death, and that the ſame Apoſtume cometh to maturation, and purgeth and ingendereth a Fiſtule, it ſaveth the Patient. And to

to prognoſticate when it will come, ye ſhall note this which followeth: When the Fever continueth in the ſayd malady, and the colour is permanent, the Spittle impertinent and not commendable, and the belly doth not his dutie, evacuating the choller or liquide matter, and the Urine is in ſmall quantitie, with abundance of Reſidence, but all other good ſignes ſhewing ſecuritie, then thou ſhalt preſage the future Apoſtumes to be nére the Eare, eſpecially when there is Inflamation under the ſides and Diaphragme. And if there be no Inflamation nor dolour in the ſayd place, but the Patient hath difficultie of breath, the which goeth away without manifeſt cauſe, then the Apoſtume comes above the Eare.

To preſage of *Puſtules* or *Apoſtumes* that come in the *Feet*.

IN vehement and perillous Maladies of the Lungs, there happeneth for the drew and health of the Patient little puſtules in the Feet, and eſpecially when the ſpittle is ſodainly changed from red to white, it is a moſt certaine ſigne of health, for by ſuch ſpittle the puſtule and dolour ceaſeth, but if the ſpittle turne not from red to white, and that the Urine be not good, nor the reſidence commendable, the Patient ſhall bée in danger to become lame by contraction of the nerves and joyntures where the ſame puſtule is. If the ſaid puſtule or little Apoſtume in the Feet be hidden and vaniſh away, or that it goe and come without purgation or maturation: Or elſe if the Apoſtume in the ſide called Peripneumonia (for it is in the Lungs) be not purged by commendable ſpittle, and that the Fever remaine, the Patient is in danger to loſe his underſtanding, and thereafter to die. Furthermore, of the aforeſaid pulmonick Maladies thoſe which are aged, but not very old (as of 50 yeares) die more often than they who are yonger.

And

And young perſons dye moſt commonly of another kinde of Apoſtume: Moreover, the perſon having great dolour in the belly lower than the Navill, or drawing neere upon the thigh with any fever: And the dolour leaving his place, doe aſcend up towards the Ribbes, it is very dangerous. For then one or two evill ſignes doe foreſhew death, but if there be many good ſignes, as eaſie ſpitting, white, and not unſavourie, it is a ſigne of evaſion: The red and unſavourie is mortall: and if there be not any evill ſigne, there is hope that the evill will come to ſuppuration and matter.

To preſage by the ſignes of the *Bladder*, in fevers.

The hardneſſe and great dolour of the Bladder is mortall, ſpecially with quotidian fever. It happeneth often with conſtipation, therefore it is mortal without remiſſion: Mortall ſigne. But if the Urine be like the matter of the Apoſtume, with Reſidence white and pointed, and thereby the dolour ceaſeth, there is hope. Some hope. But if the dolour be not aſſwaged, and the Bladder mollified, and the Feber taken away by ſuch Urine, judge preſent death: and this happeneth more to Children of ſeaven or fourteene yeares of age, than to any others of elder age.

Heere endeth the ſecond Book

The

¶ The third Book of the Preſages of Divine *Hippocrates.*

How to preſage of *Fevers.*

THE end of the Fever happeneth to one, and that with death, and to another with life in the ſame day. And if it tend unto life, all good ſignes doe appeare in the firſt dayes, whereby thou ſhalt prognoſticate the end in the fourth day, or before. And if the Fever be mortall, all evill ſignes give notice of death in the 4 day or before the firſt period and day of Judgement or critication, and the end or tearme of the Fever is (as we have ſaid) in the 4 day: the ſecond on the ſeventh; the 4 on the 20 day, the which number doth augment by quaternaries, and is produced to the 20 day in the Fever and hot maladies, and they ought to be numbred by whole quaternaries. For the yeare & moneth cannot be counted by number of whole and complete dayes, as by this computation, we make three wekes of twentie dayes, which is called one moneth or yeare of the Moone. So after this computation and augmentation, the firſt ſhall be the 20 day, the ſecond the 40 day, the third the 60 day, and it is to be noted, that the trouble maladies are of long continuance, and of more difficile knowledge and prognoſtication. Therefore it muſt be looked unto more cradly. For their beginnings are ſecret, and ſhew no ſigne of digeſtion. If therefore you will diligently contemplate it, you ſhall be able to prognoſticate to what end the Fever ſhall come. Likewiſe the quartan Fever obſerveth the foreſaid matter in his critications and indicatures, or wekes of Judgement. For that which is done in others by number of dayes, in this is

done by number of fittes and periods. The short and briefe maladies are of more easie presagement and knowledge: For it changeth presently, and in the first dayes from good to better, or from bad to worse. The healthfull signes are knowne by this, that the Patient hath good easie breath, and feeles no dolour, and sleepes in the night, and other wholesome signes. The mortall or dangerous are known, when the patient hath difficultie of breath and great dolour, and resteth not in the night, with other bad signes, whereby one may prognosticate death. To the end thou mayest presage well, thou shalt consider all the signes of digestion, the time, houres, and dayes, in which the sick are most afflicted. And if the Maladie happen to women in child-birth, or soone after they be delivered, begin to reckon from the day of her delivery, and not from the day wherein the fever began. Also to speake generally, when one feeles vehement dolour in the head and continue with any fever. If there happen any evill signe with the foresaid, it is a signe of death. But if the dolour and fever continue and persever to the 20 day, thou maist presage flux of blood at the nose, or Apostumes in the inferiour parts of the body, if there be no other signe. Sometime also there happeneth in the beginning e first dayes, flux of blood at the nose, or Apostumes principally when the dolour is in the forehead e parts nere adjoyning. And it is to be noted, that the said flux of blood happeneth most often to persons of 30 or 35 yeares of age. And Apostumes or collections to those which are elder. Also if the Patient in þ continuall fever hath great dolour and Apostumes in the eare, it is a dangerous signe. For often times the person loseth his understanding, and dyeth. Therefore one ought well to speculate the good and evill signes in the beginning of the maladie: for young persons sicke of this maladie, doe often die in seven dayes: But olde persons die not so soone. For the Feber cannot be so hot in them, nor the alienation of the spirit so vehement. Therefore the Apostume commeth to maturation, suppuration

Healthfull signes

Evill signes.

Flux of blood in the beginning.

A dangerous token.

ration and matter : But if old persons have the relapse, they commonly die. And the young die before that the Apostume of the ears come to maturation, except that which cometh forth be white and digested with other good signes, then they recover their health. Also if there happen in the continuall fever and hot Maladie, ulceration of the throat or windpipe, it is most dangerous and bad, especially when there happeneth other malign and mortall signes.

To presage of the *Squinancie* in the *Throat*.

ALL manner of Squinancie is dangerous, for it killeth the person presently, especially when there is no appearance of Apostume, or tumor upon the neck, or in the throat, and that he suffereth grievous dolour, and cannot aspire, nor respire, or draw his breath. Then it killeth the Patient in the first, second, third, or fourth day at the furthest. Also when eminence and great redneſſe appeareth with vehement dolour, it is no lesse dangerous, but more tardy and of longer continuance. But where there is eminence and redneſſe upon the neck or throat, but especially in the breast, it is more tardy and lesse dangerous, than the superior kinds. And if it doe not hide it self and goe in again, it is a good signe. But if the said Squinancie and tumor doth augment in the day of critication, and that it doe not purge outwardly, or by the spittle, although the diseased person feel himself eased, and without great dolour : it is an evill signe and mortall, or signe of Relapse. It is then a better signe and lesse dangerous, when the tumor and redneſſe appeareth outwardly. For if it descend unto the lungs, the patient is in danger to lose his understanding, although sometimes the said collection come to suppuration, matter, and purgation.

To presage of the *Uvula, Gargarion*, or *Columella*.

IT is a thing dangerous and mortall to incise the Uvula, Gargarion, or Columella being swollen, grosse or red. For either it is found in the Apostume, and Inflamation, or else there followeth great flux of blood. Therefore one must labour to heal and cure the Patient by some other means. And if he cannot, and that it be livid or pale, and that the superiour part be little, and not tumified nor swollen, but the inferiour part tumified and round, you may without danger incise and open it, and so cure it. And if you know that the Patient is not in danger to fall into suffocation, and so die, the chief thing shall be to purg the belly, if you have the opportunitie and time.

Here doth divine *Hippocrates* return to speak of Fevers.

WHen the hot Feber doth not cease, nor give rest to the Patient in one of nine dayes of critication, without other good signes thou maist prognosticate Relapse. And the Feber with healthfull signs is when the Patient is not molested with great dolour, nor labour, and that there is no other manifest cause, thou maist prognosticate Apostume and Inflamation in the kidneys, and inferiour parts, and specially to those who doe not exceed 20. or 35. yeers. Nevertheless, the same apostume doth not often happen before the 20. day of the Feber, specially to those who are aged: although that the Feber continue longer to old persons, than to young: such apostume also doth happen commonly in continuall Fevers, which keepeth no order nor manner of accesse or fitts, called wandering or uncertain Fevers, viz. afflicting in sixty twice or thrice a day, then ceasing as long, and afterward returning without observing any order: Oftentimes they change into quartan fevers, especially about harvest. And as the aforesaid apostume doth happen most often to young persons, so the quartan feber happeneth to men and women that are in yeers. And as for the nature of the Apostumes, they doe most usually and commonly happen in winter

Signe of Apostume.

winter, but are moſt ſlow, and prolixe, and leſſe ſubject to relaxe.

To preſage by ſignes of vomiting in Fevers.

WHen it ſeems to that febricitant that there are flies and black things appear before his eies, with dolor in the head, without other bad ſignes or mortall, thou mayeſt preſage vomiting of yellow choller, eſpecially when the patient feels dolour at the mouth, or opening of the ſtomack. And if he feel ſtiffenes, chilnes, or cold with it, in the inferiour parts, and under the *Hypochondria*, the vomiting ſhall be ſo much the more haſtened. And if the patient doe then eat and take repaſt he ſhall preſently vomit. And to preſage moſt apparantly when the dolor of the head moleſteth the perſon in the firſt day of the fever, and be augmented the fourth or fift day, the fever will end on the ſeventh, and the perſon ſhall be cured. And if the dolor begin the third day, and augment in the fift or ſeventh, the fever ſhall end the ninth or eleventh day. And if the dolor begin the fift day with convenient urine, and other good ſignes it ſhall end the 24. day, and this happeneth as well in women, as in men, eſpecially in tertian fevers to perſons of 30. yeers of age, and to young perſons in continuall fevers, and perfect tertians. And when there doe not appear flies in the fever with dolor of the head, nor black things corruſcant and reſplendent or ſhining as lamps, and ſplendor, or briteneſſe, and that the patient feels torſion, or tumor or inflation under one of the ſides, he ſhall have in place of vomiting, inflamation, and of dolor, flux of blood at noſe, and this happeneth chiefly to young perſons under 30. yeers, and to older moſt commonly vomiting. And yong children under 7. yeers old fall into a ſwound by hot fevers, ſpecially when they are bound or conſtipated in the belly, and ſleep and change colour, ſometime pale, then red, green, or livid: but thoſe which exceed 7. or 8 yeers, they fall moſt often into a ſwound, if there happen not ſome perilous and dangerous ſignes, as of Phrenſie.

The Concluſion of the whole Book of the Preſages of *Hippocrates*.

NOw then for finall concluſion, let the Phyſition labour to know the ſick perſons and maladies: alſo the good and wholeſome, and the evill and mortall accidents of them, as well in young folks, as old, and in all infirmities, eſpecially fevers, to the end to preſage life to one, and death to another: alſo the brevitie and prolixitie of every maladie, and the tranſmutations and other inconveniences, collecting and accumulating all ſignes good and bad, and conſidering and comparing the ſuperiour and inferiour, which are able to overthrow, or ſave the patient, and that by urine, fecall matter, ſpittle, ſweat, and other excrements and ſuperfluities coming out of the body. Moreover, let him practiſe to conſider, and ſpeculate, or note as well the time of dates preſent, as paſt, viz. the variation of weather by winds, cold, heat, drought, and humiditie, and the condition of the whole year, and four parts: as the Spring, Summer, Harveſt, and Winter. For although that all maladies may happen at all times, yet ſome doe more commonly happen at one time than another. And ſome ſignes that be good or bad, come and happen rather in one day, hour, or moment, than in another. And to the end thou maiſt not doubt to preſage and prognoſticate according to the doctrine and preſcribed inſtructions, know that we have here experimented theſe things in Æthiopia, Mauritania, Lybia, in the Ile of Delos, in Heſperia and Scythia, briefly in the Orient, Occident, South, and North: and have found it true as we have ſhewed. And therefore doe not deſpaire, but take courage, and endevour thy ſelf to know the ſaid things, and thou ſhalt eaſily attain to greater knowledg of things, than thou canſt imagine, and ſhalt marvaile how theſe things can ſo well concurre, and ſucceed ſo rightly. And if thou doeſt well ponderate my prin-

To preſage of life or death.

ciples

ciples, doubt not at last that there can happen any maladies to thée, whereof thou mayst doubt, or cannot have the knowledge of: and that by the said instructions, if thou doest understand them well, and especially in these which observe dayes of affliction, and manner of Paroxysme, and which end in one certaine number of dayes and certaine space, as wée have said, if thou wilt speculate exactly, and take mature deliberation.

(*.*)

FINIS

A DISCOURSE OF THE VVHOLE ART OF CHYRURGERY.

VVherin is exactly set down the Definitions Causes, Accidents, Prognostications and Cures of all sorts of Diseases, both in generall and particular, which at any time heretofore have been practised by any Chyrurgion, According to the opinion of all the ancient professors of that Science.

Which is not only profitable for Chyrurgions, but also for all sorts of people; both for preventing of Sickneſſe, and recovery of Health.

Compiled by PETER LOWE a Scottiſhman, Doctor in the faculty of Chyrurgerie at Paris, and ordinary Chyrurgion to the French King and Navarre.

Wherewnto is added the Rule of making Remedies which Chyrurgions doe commonly uſe, with the Preſages of Divine Hippocrates.

The fourth Edition, corrected, and much amended.

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Chapter V.

Of the disease of the head called *Psydracia* and *Exanthemata*.

Definition. *Adamus Lodetus de conf. vulnu.*

Those little pustules or Apostumes which possesse the outward skinn of the head and roots of the hair, are like unto the biting of fleas, or as if one were burnt with hot water, and are of divers colours; sometime white, otherwhiles red and flat, otherwhiles high swelled, pointed, and dolorous, avoyding a corrupt matter, especially being prest upon, they are sometimes ulcerated.

Cause.

The Cause proceedeth of over-great abundance of grosse, corrupt, filthie, and vicious humors of the body, the which being converted in vapours, is sent to the head, the which nature expelleth to the externall parts thereof.

Signes.

The Signes are evident, & may easily be discerned from those which doe proceed of a maligne infectious humor, as those of the Pox, which are evill & more in number, redder and watry, more broad, avoyding a matter virulent, of the which I shall speak in their own places.

Cure.

The Cure consisteth in generall and particular remedies, as purgations, pilloties to purg the head, made of Aloes, Colocynth, and such like. Use fumes, to provoke the head to sweat: The particular remedies are of divers things, and diversly composed, according to the nature of the humor and pustules, which is sometime hot, otherwhiles cold. The simples whereof we make our compounds for these pustules, be these. Take the leaves of Nuts and Cypress, Lytharge, Ceruse, Acatia, Galla, Sulphure, Myraboll, Nutmegs, Nitrum, oyl of Rose, Vinegar, Water, Wine, Wax, juyce of Wallowes, Barley flower, Pimpernell little roots. Paulus counsaileth for these pustules to take Ruthe, Honey, and Allom, bray all well together and annoynt the part being

Guilel. de sali.

Paul. 3. cap. 3.

first

first raſed. For the ſame purpoſe, take Lytharge of both ſorts, Ceruſe, of each halfe an ounce, quicke brimſtone two drammes, beat all well and mix with a little ſwines greaſe, and make a liniment. Viaticus approveth much, bitter Almonds well waſhed with warme water, beat them while they come to the conſiſtence of an unguent, and annoynt the part; bitter Almonds alſo bruſed with little roots and incenſe, and boyled in vinegar, water, or wine, and apply on the ſores. If the puſtules or little ulcers agree not with thoſe remedies, but be rebellious and uneaſie to be cured, in that caſe we touch them with the water of Sublemy. If they be not much inflamed, you may touch them ſoftly with water of ſeparation uſed by the Gold-ſmiths. If you think theſe waters over-ſtrong, mix with them a little Plantin or Roſe water: or this. Take 4 ounces of Roſe water, 2 ounces of Aqua vite, 1 dramm of Sublime, let all ſeeth in a veſſell of glaſſe till the Sublimie be conſumed; and ſo follow out the reſt of the Cure, as you have heard in Erefipelas.

Viaticus.

Touch them with water of Separation.

Chaper VI.

Of Tinea.

Tinea or Achoris is a malady of the skinn and muſcles of the head accompanied with ſcabs, ſcurffes, ſcalles, ulcers, and falling of the haire, eaſie coloured, fetive, unpleaſant, horrible to the ſight, of the which there are five kinds, as ſaith Guydo: yet Galen doth only allow three kindes, and I am mindfull here to ſpeak of two, which are moſt common: the one is humid and ulcerateth, the other with a dry ſcabb full of ſcalles: of theſe two, the one is eaſie to heal, and familiar to young children, poſſeſſing for the moſt part the head and face, the other is worſe, accompanied with malignitie, inſident to people of elder age.

Definition. *Holy Abbas. ſerm. 8 part. 1. doct 2.* *Guydo.* *Galen.* *Paul. l. 3. ca 3.*

The cauſe of that which happeneth to young children, is the impuritie of maternall blood they were nourriſhed with

Cauſe.

in the mothers wombe, or by the father, mother, or nurse, who had the disease for the time. The cause of those in elder age, proceed of evill regiment of life, a corrupt salt putrit or mirion of a corrupt, grosse, bilious, melancholick humor, or by haunting such as be infected, for it is contagious.

Signes. The Signes you have heard in the description, besides that sometime it is virulent, sanious, corroding the skinn full of little holes, like those which the moths make in cloth, and is called by the Latines *Ulcera capitis manantia*. Sometime it is dry, accompanied with grosse thick scabbe, by reason of the vehemency of the corruption and adustion of the humor.

Judgements. The Judgements, in young ones it is easie to heal, and such strong remedies ought not to be used as to those of elder age: this, with all other scabbs of the head and face that happeneth to young children, with that purulent rotten humor which issueth at the eares, doth deliver them from Epilepsie, and divers other great maladies, so better oftentimes to have patience and let nature work, than to be over-curious in the cure.

The Judgements of the elder people, if it be recent, it is somwhat difficile to cure, and is called *Tinea quasi tediosa & fortiter tenens*, and being inveterate it must have a long time great travile, very difficil to helpe, and almost incurable: or if it cure, it leaveth the vestige and weakeneth the part with emptinesse of haire.

Cure. The cure in young children shall be, first in prescribing a diet to the Nurse, which may be done by the advise of the skilfull Physitian, next use this unguent, take the juice of Fumentory, with a little Centory, Scabious, Annula Campana, of each 3 ounces, Lytharge 2 ounces, mire them with 4 ounces of Swines grease, oyle of Walnuts and Wax a

Unguent for Tinea. sufficient quantitie, and make an unguent: or this which I have often times used, take Turpentine and wash in common water, thereafter in fumentary water, fresh butter washed in rose water 2 ounces, salt halfe an ounce, two yolkes

Gord. part. 11.

of

of eggs, juice of Lymons and oyl of rose, of each 1. ounce, Camphire half a scrup. of these you shall make an unguent and annoynt the head. You shall finde divers other remedies for this purpose, set down in my book of the deliverance of women, and diseases incident to young children.

The cure of these in elder age & inveterate: first evacuate the humor which provoketh the disease, next raise the head, every week once wash it with a lixivie made of ashes of the vine tree of Gradelen, in the which shall be sodden Cephalick hearbs, and some sope, and wash the head therewith, after the which vesicatories were good to be used. The Cure of elder people.

The common people use only for this purpose strong urine, which is not good: For as Galen saith, it is of a salt ish quality, such as are skilful in this cure, do first raise the head, and pluck out the haires by the root, with a bonnet made only of pitch. Leboc counsaileth to take flower of clean rie half a pound steeped in vinegar, next take half a pound of pitch put in powder, melt all on a soaking fire, and work all together, thereof make your bonnet which not only pulls out the hair, but also the evill humor, that being done, you shall use *unguentum inulatum cum duplici mercurio*, and annoynt the head, avoyding allwayes the sutere and openings of the head, for the mercurie is hurtfull for the braines. Or you may use this, approved by *Ambroise Parrie*: take *unguentum inulatum*, with double Mercurie, Egiptiack, of each 3. unc. Vitriol Roman in powder, 1. dramm incorporate all together, make an unguent, and annoynt the head. Strong urine is not good. Paræus.

Petrus Hispanus counsaileth to raise the hair and wash the head with strong vinegar and urine, then take the root of *Hedra campana*, tender branches and leaves of the figg tree, bitter Almonds, bruise all with oyl & strong vinegar, and unto it the ashes of the roots of green cole, Colwort, Lytharge, hydrargiron, Cerusse, Salt, seeth and bruise all together and apply unto the head. Petrus Hispanus.

Gordonius doth approve for this purpose, if it be rebellious and inveterateth, as also for all other infections of the Gord. part. 11.

skinns, as lepr̃ose, *malum mortuum*, *Morphea*, and such like, this unguent, take the two Elebors, quicks himstone, Vitrioll, Allom, Nut-galles, finders of Orabelie, of each one halfe an ounce, make all in a powder: thereafter take the juice of Borage, Scabious, Fumitarie, and Paritary, of each 3. ounces, let all seeth with the grounds of strong vinegar and old wine, on a soaking fire, till the juices be consumed, thereafter put unto the powder, with the decoction with half an ounce of liquide pitch, make all one consistence of unguent. Some use for this purpose *unguentum marcatum*, *agrippa*, *aragan. de albea* adding to them the 12. part of *Hydrargirum* and anoynt the head, save only the sutors. The malady called *Favus* or *Chyrion*, is little different from this either in Cause or Cure, except the holes are larger, and casteth a matter more like unto hony, for the which it taketh the name.

Powder for Ulnes.

Chapter VII

Of *Hydrocephale*, and *Physocephale*.

Definition. *Albuc. lib. 2. cap. 1.*

HYdrocephale, is a watry serous filthy blood, or humor, which doth occupie the whole head or some part thereof, especially in yong children: and Physocephale is a windie humor, which doth the like. These humors are either contained betwixt the pericran and cranium, betwixt the muscles, betwixt the pericran and cran, or betwixt the cranium and members, which cover the brains called *dura* and *pia mater*, but the humor in that case is not so great.

Difference.

Cause. *Adamus Lonicerus de cons. valetud.*

The Cause is either externall, or internall. The internall, cometh from the matrice and by the mothers milke, which is too serous and watry, and such like soon as hard watry humors. The externall cause cometh of cold pyslemtie, after the birth, also through the unskilfulness of midwyfes, as

I have sometimes remarked, who did draw and pulle the childs head so much, at the time and after the delivery, that the veins and arteries did break, not being as yet strong, so the blood did shade and spread through the rest of the head, and so degenereth into water. *Paul. 6. cap. 3. Actius lib. 6. cap. 1.*

The signes are great tumors, with deformity of the head, the eyes and face swelleth, as doth appear in hydropick. Signes.

The judgements are, such as be within the cran are incurable: those that are betwixt the cran and pericran, or betwixt the pericran and muscles, may be cured but hardly. It greatly stirs sometimes to such greatness that the child dyeth. Judgements.

As for the curation of such as are curable, they are partly healed by diet, and using of drying things, abstain from flowing things humid, as you have heard in Oedema. Also by externall remedies applyed to the part, that hath any drying vertue, with some friction: also to comfort the head, which shall be done by fomentations, lineaments, unguents, and such like, made of Calaminth, Dzigan, Betone, Cammomill, Melilot, Anthos, and red Roses. Also you may make leribes of the ashes of the Vine tree, thereafter shave the head, and apply this emplaister following. *Rec. olibani unc. 1. farinæ ciceris drag. 1. gummi arabici seminis raphani & anethi an. 1. unc. misce, & fiat emplastrum.* Dzthis, take Honey half a pound, Dzigan, an handfull and half, common salt half an ounce, mixe all in form of a Cataplasm and apply hot to the head. Dz this, which I have sometimes used: take shell snailes and bruise them shells and all, and apply them to the head in form of a plaster, so let it remain while it fall away of it self, for it doth mightily resolve: If by these means you profit not, the humor being in great abundance, you must make incision in divers places, according to the part and humor therein contained, but in such sort that the humor and water flow not all at once, but by little and little, of over-great evacuation soodenly done, great accidents and sometime death ensueth, chiefly in young children: so it shall be best you make your Cure. Emplaister for Hydrocephale. Make the evacuation by degrees.

evacuation by degrées, and cure the wound as you have heard in Oedema. If the cran or membraines are offended, ye must use incision and perforation of the cran, then evacuate the humor and heale the wound, as in others. In the meane while purge the Nurse, use good regiment, and such as hath the virtue to dry, purge the head and hold the belly lose. There is another kinde of this called *Macrocephale*, which is a supernaturall greatnes of the pan, flesh, and muscles, and not properly Tumor; it receiveth no curation, it is seldome seene one of this sort. I did see in Paris in the yeare of God 1583. to the greatnesse of a pot, which would containe 12 English pints.

Macrocephale, what

Chapter VIII.

¶ Of the tumor called *Nodus* or *Gangleon*, which commeth in the head.

Definition. *Cels lib 7. cap 16.*

Those tumors which happen commonly in the head, are sometimes hard, other whiles soft, commonly round, it doe happen for the most part in dry nervous parts of the body, but chiefly on the head and joynts, hands, and feet, ridge back, wrests of the feet and hands, other joynts, and parts empty of flesh.

Cause.

The cause, are strookes and wearinesse of the joynts, veins, and tendons, either by extention, contraction, strooke, or hurt: also by the humor which floweth to the part, and can neither digest nor turn to good substance as it ought, but degenereth in a cold grosse thick humor, amongst the substance of the fibres and tendons, chiefly in the articles and *Par. lib 4. 20. cita.* such other parts, as you have heard in Atheoremata: as also the Sinnes.

The

The Cure consisteth first in good diet, eschewing all meats which ingender grosse humors, using things of good digestion, and abstain from drinking of water, purge, and bleed, haunt no humid places: as for the particular remedies, this humor is sometime inclosed in a membrain, and in that case proceed to the Cure, as you have heard in Atheorema. Sometime it is neither inclosed in a bag nor chest, and then we apply a thinn cake of lead, rubbed with quick-silver, which hath great virtue to resolve, or an emplaster resolative made of *Galbanum*, *ammoniacke*, oyl of Lillies and Bayes, Brimstone and Vitreoll *Roman calcined*. Also the emplaster of Vigo, *Diachilum magnum cum duplici mercurio* and apply it. Or this, *Rec. emplastri. exicrecei, unc. 1. mucilaginis, althea, lini & Phænugraci sing. dragm. 6. Euphorb, sagap, ammoni., sing. dragm. 3. dissolvantur gummi in aceto, fiat emplastrum.* At the first it is good to rubb it with fasting spittle while it grow red: if it be mobile and small cragged, it may be knit with thread or silk somewhat fast, drawing it faster every day, so it cutteth the sooner but the better: if it be dipped in *aqua sublimata* and dryeth before the applying, so it will fall of it self.

Cure.

It is inclosed in a bagg. *Avicen.*

Orib. li. 7. fen.

Rub it with fasting spittle.

The rest of the Cure is easie, by these means you may take away warts in any part: if it neither resolve nor open of it self, we open it with a launce or Cauter, produceth the fall of the Eschar, and consumeth the chest or bag with Egiptiack, powder of Mercury, and such like, cleanse the wound and cicatrize it.

In these sorts of tumors, divers matter is oftentimes found, like as in Atheorema and Steotema: there is some of those tumors, that you would think them Carcinomators. I remember once in Paris being called with the famous and learned medicimer D. Blackwood, to the reverend Father John Beton Arch-bishop of Glasgow, who had one of those tumors on the ridge of his back about the lord or first vertebre, to the greatnes of a mans fist: it was extream hard and dolorous, and so great at the root that it could not be knit.

Doct. *Blackwood.* Arch-bishop of *Glasgow.*

I applyed all remedies to resolve and mature, but nothing availeth, so I was enforced to open it with a Cauter, where I found in it contained a matter like cut stones, great coals, but small quantitie of liquid substance. I did evacuate the humor with suppuratives and deterstives, with grosse tents every day applyed twice, with this remedie, Terebinthin well washed in Aqua-vite, with a little hony of Roses mixed together: so cleansed the ulcer, consumed the bagge, corrected superfluous flesh with powder of Allom and Mercurie, and cicatrice the wound, and so the noble man recovereth his health, to his great contentment.

Powder to correct the superfluous flesh.

There are in the head tumors of the same nature, such as *testudo* and *talpa*, which sometime are without ulcer and corruption of the bone, and in that case are cured as the former: sometime they are with corruption of the bone *cranium*, and in that case the humor must be evacuated and the exfoliation of the bone procured, as ye shall hear in the chapter of ulcers, with corruption of the bone: as for divers other diseases of the head, have your recourse to Hernius.

Chapter IX.

¶ Of they Eye, the proper instrument of the sight, and most noble of all the externall senses.

Amongst all the Senses, that of the sight hath been esteemed by the common consent of all the Philosophers, to be the most noble, perfect, and admirable: the excellency whereof is shewed to us many wayes, like as by the diversitie of the objects which it representa, and by the operations which are spirituall: also by the particular object which is the

the sight, the which sight causeth us to know more diversitie and difference of things, then any other sense: So Aristotle doth call it Sense, because by it all brave Sciences were invented. It is composed with such excellency & good parts, that Plautin and Synecius doe call Nature a Magician, for having put in such a little part so many good graces. Orphe calleth them the mirrour of nature. Alexander the Peripatick, calleth them the windowes of the soul, for by them is remarked all our passions, as love, envie, sadnesse, fear, hardnesse, pitie, revenge, despare, hope, health, sicknesse, life and death. Blemor and Cyren Physitiners, were of opinion that the soul was placed in the eye, for in them thou seest as in a mirrour all that is placed and hid within them, and is given to guide and draw us to the knowledge of God in beholding his marvailous workes, as also to be guyders to the whole body, and to contemplate high things, and are admonished of the place to which they ought to look, according to that which David saith, I lift mine eyes to thee that dwellest in the Heavens. Vigo writeth, that the eyes of a dead Virgin hath great virtue against enchantments and charmes. Hippocrates commandeth us, when we first visite the sicke, to cast our eye on the eye of the sick, where shall be seene the strength or weaknesse of the animall faculties: if the eye be cleere and bright, there is good hope: if obscure and tenebrous, it doth prognosticate death. Likewise the excellency of it is knowne in the certitude of the actions, for no doubt it is the sence most assured, whereof commeth the olde proverb, that one witnesse which hath seen, is better than ten which only heard.

Aristt. Metaph.

Plautin. Synecius. Orphe. Alex. Peripat.

Blemor. Cyren.

They are guiders to the whole body.

Psal. 123.

The Philosopher Thales saith, there is as much difference betwixt seeing and hearing, as betwixt truth and falshood. Anaxagoras affirmed so of that part, that he thought we were only born to see. Galen Prince of Physicke, doth call it a divine member, which nature hath placed in a hollow place, for which it is called by the Latines *Orbita*: it is so placed, that it should not be exposed to the hazard of a million of injuries,

Thales. Anaxagoras.

Galen.

juries. They are fortified about with foure hard bones, for their better protection & decoration, as also to apeare more beautifull above them is the forehead, underneath the chaft-blade, on every fide the angles or corners with the eye-lidds called by the Latines *celia a celare*, to cover & guard the eye, as faith Iſidorus. In caſe they ſhould be altered with over-great light: they have likewiſe muſcles to give voluntary movement with ſundry other parts, as you ſhall heare at length.

Iſid. li. 10. ca. 1.

Now ſeing the excellency of the eye is of ſo great importance and profit unto us, the skilfull Thyrurgion ought to take great care & diligence for the conſervation of the ſame, eſpecially to know the temperature and compoſition of it: the nature of each part thereof, with their functions and offices, to what uſe they ſerve; to the end he may uſe fit remedies for each party diſeaſed, ſeing it is holden for a *maxime* in medicine, that one cannot know what commeth contrary to nature in any part, except he will know firſt the nature of each part and things belonging thereto.

Chapter X.

¶ Of the deſcription and Compoſition of the Eye.

Barbo de proprietat. rerum.

The eye which maketh man to ſee, is called of the Greeks *Ophthalmos*: it is placed in the higheſt part, to make us contemplate high things and diſcerne a farre off, alſo to ſerve for a watch-man and guide, that nothing hurt us. It is of forme round or pyramidall in the inſide, which forme is moſt capable and moſt eaſie to move. It is of ſoft ſubſtance and double uſage, the one common to all creatures to guide them, the other ſerveth onely for man, and maketh him

him to know God by visible things: they be two in number, to the effect if one be toucht or hurt, the other may serve, as also maketh the sight more perfect to see divers objects at once. The temperature is cold and weak; it is very sensible, by reason of the great simpathy it hath with the brains: it is of sundry colours, which either proceedeth of the humor *Tunick Uvea*, or of the spirits: it hath seven muscles to make it move and keep firm. The most part of the Anatomists find only six, which take their beginning at the circle *Orbita*, in the which the eye is placed; the first, is scituated above the eye, to lift it straight upward; the second, is scituated beneath, and pulleth it downward; the third, is scituated in the great corner of the eye, and turneth it towards the nose: the fourth, is scituated in the little corner or canthus of the eye, and turneth it towards the eare or temple, and having accomplished their actions, pulleth it inward. The actions of the other two muscles which are obliques, is to turn the eye, not fully, but in half circle. The first is scituated in the upper part of the eye and the great corner, by a membrain, and draweth the eye towards the nose; the other is scituated underneath, and turneth the eye towards the eares. As concerning the tunicks or membrains of the eye, there is diversitie of opinions amongst the Anatomists. Hippocrates remarketh only four, Galen five, whose opinion Gulmio and Petrus Franco hath followed, and learnedly have written of the eye. Some late Anatomists doe make nine. Andreas de Loran, who is the most excellent Anatomist that hath written, doth remark six. The use of them is to involve and containe the thin humors together in their own place. The first of them is called *Adnata* or white of the eye, it is strong & covereth the rest, & hath his beginning in the pericran, and endeth in the circle *Iris*, which is of sundry colours. The second membrain is called *Cornea*, because it is hard, clear and strong, like the horn of a lanthorn, and hath the beginning from the *dura mater*. It containeth the humor, and maketh the eye round, and serveth for a lan-

The temperature of the Eye, cold and weak.

Gal lib. 10. de usu part.

Hippocrates. Galen. Gulmio. Petrus Franco.

thorn

thorne to the cristalline eye. The third is called *Uvea*, and is like the skinn of a vine berre or grape being prest: it hath the beginning from *Pia mater*, which is the second skinn that covereth the braines: it covereth all the eye, except only within, where it is placed in a little round hole, called the pupill or windy of the eye. It is of sundry colours; without, it is black; within, blew and green: it is soft, & preserveth the cristalline humor from the hardnes of *Cornea* and doth rejoyce the cristalline with the diversitie of his colours. It retaineth the spirits that they doe not dissipate, nourisheth the *Cornea* and humors of the eye, for the which nature hath implanted it full of vains and arteries. The fourth is called *Aracnoides*, it is very white and delicate, like unto the thinn stricken of an yeoyn or Spiders webb: it doth involve the cristalline humor immediately, & defendeth it. The fift is called *Retiformis*, it is interlaced with innumerable little threads like a net, & commeth from the marrow of the nerve Optick, as saith Loran. His office is to bring the animall spirit to the cristalline, report all the visible things to the nerve Optick, & carrieth the nourishment to the humor *Vitrei*. The first and last is called *Vitrei*, because it containeth and involveth the humor *Vitrei*, within these tunicks is contained the three humors. The first is called *Aqueus*, for the similitude it hath with water: or like the white of an egg both in colour and substance, it is inclosed betwixt the humor cristalline & membrain *Cornea*, partly to impasse the great drineese that might happen unto the cristalline humor, as also to defend the cristalline from the hardnes of the membrains. The second and chief principall instrument of the sight is called cristalline, & in Latine *Glacialis*, it is white and cleer like Cristall glasse, midway solide, of figure round, somewhat prested before and behind, so is more firme and sure, for being altogether round, it moveth over-easie, & is not so stable: it is scituated in the middest of the eye upon the humor *Vitrei*, and before it is the humor *Aqueus*: it is involved in the own proper membrain called

It is of sundry colours.

Three humors of the eye.

The first humor & usage.

The second humor and usage.

called *Arnold*, not known by our ancients. The third and last humor is called *Vitreus*, because both in colour and substance it is like to melted glasse: the use of it is to prepare the aliment to the crystalline humor, and make the blood white, for if it were nourished with pure blood, it would be somewhat red in colour, it defends the crystalline from the hardnes of the membraines, and retaineth the spirits. The eye is likewise endued with two pair of Nerves. The first of them is called *Optasie* in the Greek, and *Visio* in the Latine, which bringeth the spirit animall & interior sight to the crystalline: the nerves Opticks is thought by the old Arabians, to have their originall from the interior ventricle of the braine, and by the Greeks from the middest of the lower part of the braine, the which the most part of all our Anatomists doe hold. Andreas de Loran approveth them to have their beginning from the posterior part of the braines, where the little and mickle braine doe meet called *Cerebrum* and *Cerebellum*. which opinion is most true, as I have seen in the School of the Chyrurgions in Paris by Master Soveran Pinio Doctor of Chyrurgerie, where he did evidently demonstrate every eye to have one of those nerves pertaining to it: yet doth differ from other nerves, because they be more soft, full of holes and perosities, not cave, as thought Galen and Herophilus.

The Third humor & usage.

Whence their originall is.

Master Soveran Pinio.

Those nerves and perosities doe serve to carry the visuall spirit to the eye from the braine, but before they come to the eyes, they be gathered together like the yron of a Mill, making one only body, whereby the spirits and sight is carryed conjunctly to the middest of the crystalline humor, which maketh one eye being closed, we see as perfectly as with both. After this conjunction they do divide, and each of them passe through the holes of the head, and is severally implanted in either eye, and in the interior part of the nerve which is soft, and marrowish, doth dilate it self, and maketh the tunick reticular. The exterior part of the nerve endeth his course in the membraine *Cornea* and *Uvea*.

Why wee see as well with one eye, as both.

The

Two pair of Nerves.

The ſecond paire of nerues are leſſe, and goe to the muſcles of the eyes, to each eye one, and cauſeth them to moue, and ſendeth little ſmall threds to euery muſcle. This paire hath his beginning and ending with the former. The eye hath likewiſe diuers little vaines and artiers, which bringeth nouriſhment and life to it, they proceed from the branches of the Jugulars and Carotides. The eye hath alſo a fatneſſe of the Eye. fatneſſe which goeth about it and holdeth it humid, and defendeth it from the cold, retaineth the naturall heat, which is the cauſe that it becometh not cold. The eye hath alſo three kirnels or glands, one aboue, another vnderneath, and the third in the great corner of the eye: The firſt two hold it moiſt and weake, and are like vnto water ſponges, receiuing the humor which commeth from the braines, that it fal not in ouer great abundance on the eye, from thoſe glands From the glands proceed the teares. proceedeth the teares when we weepe either for ioy, ſorrow, weakneſſe, or rubbing of the eyes, as doe women when they would appeare to weepe for any cauſe. The third which is in the great corner of the eye, ſtayeth the excrements which come to fall on the eye, ſo that thoſe who haue thoſe glands conſumed, doe continually weepe, as you ſhall heare in the Chapter of *Ophthalmea*.

Chapter XI.

¶ A briefe reherſall of ſuch common maladies as befall the whol Eye.

Hauing in the former Chapter, briefly ſhewed the deſcription and compoſition of the eye, ſo I ſhall now ſet down ſuch common diſeaſes as vſually doe happen in the whole eye, and euery ſeuerall part thereof, beginning firſt at ſuch maladies as are common to the whole eye, which are diuided

divided into Similars, and Organicks: The Similars are in the temperature weak and dry, hot and cold, either with matter or without: The Organicks consist in the evil confirmation, as greatnes, littlenes or inequitation, as when the Eye is over-great, and is called the Ore-Oye, which being cast out from the circle, is not so quick, nor the motion so prompt, by reason the spirits are dissipate, it is called *ex Ophthalmia* or *oculi promanentes* in latine: the greatnes doth happen by the vice of the first confirmation, or by accident, as by tumor of inflamation, or great defluxion: The littlenes of the Eye called *atrophia* or *macies oculi* cometh by nature, and is called the pigs Eye, or pincking Eye: it cometh also by accident, as by dissipation of the naturall heat, caused either by colar, continual fever, great wayling, weeping, and defluxions, so that the Eye is weakned and cannot draw the nourishment, and so becometh atrofied and extenuate; Or inequitation, as when it is out of the own place, which may happen by cause extern, as saith Avicen, like as strokes, falls, violent coughing, vomiting, blowing, and such like: Or by cause intern, like as great fluxion which loseth all the muscles of the Eye. Or by inflamation or solution of continuity, as when the Eye is burst, called in Greek *Raxis*, and by the Latines *Ruptio*: also by the confusion and mixion of the whole humors together. These be the maladies which occupie the whole Eye. As for *Nictalopia*, *Nictiacu*, and *Amblyopia*, they are not maladies of the Eye, as some think, but only simptomes of the spirits and humors. As for the particular diseases of the Eye, they differ according to the parts, as humors, tunicks, nerves, muscles: so first I shall begin at humors, as the most noble part of the Eye, the which method is followed by Galen. The humor cristalline may suffer all sorts of diseases, but the most common is the intemperature dry, or when it goeth out of the own place; the dry temperature is caused by the withering & drying of the Cristallin called *Glaucoma*, and becometh all white. Hippocrates saith this happeneth oftnest to old people, and is for

Similar parts.

Organick parts

In inequitation.

Lib. de simpl. caussis.

Glaucoma.

Hip. 3. aphor.

and doth putrifie and corrode. The cause intern proceeds of humors, which having acrimonie and qualitie maligne, that commeth from the head, as happeneth in Pegroms, which humor doth flow to the gummes and roots of the teeth: Also rotten sharp vapours ascending from the stomack, and maketh corrosion of the teeth and nerve, by the which causeth extream pain, it may also proceed of any of the four humors: aged people which are much subject to defluxions of the lights or brains, are much subject thereunto. The signes are evident, and may be known by the patient and assistens, as also by the cause, for if the humor doe proceed from the head or gummes to the nerve, there will be great dolour and heavinesse in the head, continuall rhume falling on the part, with great generation of flegme. If it be of vapours which ascend from the stomack, there will be great heavinesse and dolour in the part: if the cause proceed of the four humors, as either of them, as sometimes happeneth, there will be rednesse, heat, corrosion, gummes sore, paines, with great pitting. The judgements, if the dolour of the teeth proceed from the gummes the dolour is not removed by pinching forth of the teeth: if the pain proceed from the nerve or ligament, by removing of the teeth the pain ceaseth, by reason the matter which did corrose the nerve, was retained by the teeth, and could not easily passe away: if the the teeth be pale & black in fevers, it is an evill signe: if drie and dry like a piece of wood in hot fevers, it is mortall. The cure consisteth in generall and particular remedies. The generall shall first be in the form of diet, eschewing all things which may provoke great heat or great cold for they are both hurtfull: abstain from all sharp, sowre, sweet, bilious, and unsavoury things, and also with: you shall use things of safe digestion, abstaining from all exercise that may impaire the sinne: next, if there be plenitude of humors, purge the body, if pestilentiall the head: if the evill proceed of heat and plenitude of blood, take blood of the cephalick vein, and apply ventosses on the shoulders with scarrification, open the Ranules un-

der

Gal. de compo. med. per locos cap. 4.

Signes.

Gal. de compo. medi &c.

Judgements.

Hip. 4. aph 53.

Hippo. in his Presages.

Cure.

der the tongue, that of the lips, and dip the rot of the teeth, for that doth discharge the part. The particular remedies shall be according to the cause, as if it proceed of an hot humor, you shall retain it in your mouth and wash it in Vinegar, wherein hath been boyled Juniper, Mandrages, leaves of Poppie, Lettice, and Cypress, and anoint externally with oyl of Roses, Poppie, Mandrages, apply to the sore tooth a beam of Opium dissolved with oyl of Roses, or Hyoscyamus perficum: if it proceed of a cold humor, you shall wash your mouth and teeth with warm wine, wherein hath been boyled Sage, Betonie, Mint, Pariter, Calamynth, Fennell, Marrubium, and Tetymentill, annoint outwardly with oyl of Camomill, Laurell, Lillies, Dimasper, and Rue, apply a little plaister of Mastick or Cumine, alowey on the arteries of the temples, to intercept the humor, you shall also chew in your mouth a little of the root of Angelica, or a clove of Girofell, & put a little of either of those to the tooth. I doe use in those dolours, to apply externally the crummes of white bread boyled with milk, yolks of eggs, and fresh butter, adding thereto some Saffron, oyl of Camomill, and Lillies, apply it warm betwixt two linnen clothes upon the swelling as soon: divers other anodine cataplasmes and plaisters may be used for this purpose.

Johannes Serapionis.

Annoynt the tooth outwardly.

Chapter XXX.

Of the corruped and hollow tooth, and the way to cure it.

The tooth as I have said, is subject to divers passions and griefes, wherein the hand of the skill Chyrurgion is required: like as corruption, perforation, holed, cavernous, gnashing or grinding, trembling, stupiditie, lediditie, or blackness, and unstable, for the cure whereof you shall hear familiar remedies in few words. The Cause of corruption which happeneth in the teeth you have heard in the last

Tra.li.3.ca.13.

Cause.

Cure.

laſt Chapter. The Cure of corruption or perforation is, firſt in the form of diet, abſtaining from milk, green fruit, all hard things, vomiting, and things of ſtill ingeſtion: waſh the mouth and corrupt tooth with Claret wine, wherein hath been boyled a little Rosmarin, and that cuprum, next touch the part corrupt with a little Aqua vitæ that is well rectified, ſtrong water or oyl of Vitreoll, Sage, Cloves, Sope, a little Cotton in either of theſe, and apply to the corrupt or hollow tooth; beware the cauſtick oyl touch no other part: if by applying of either of theſe things you profit not, you muſt uſe the actuall Cauter or hot iron, made according to the proportion of the corrupt part: for great perſonages we make thoſe Cauters of gold or ſilver, and apply burning hot, as the other, to the corrupt & hollow part: ſometimes the corruption is in the ſide of the tooth, which by time might be corrupt: in that caſe you ſhall file away that which is ſpoyled, ſo the remanent ſhall ſerve for your uſe, the file is uſed in ſuch teeth as are more eminent than others, alſo in broken teeth which hot hurt the tongue and lips: by uſing of theſe remedies, the corruption and pain ceaſeth, except always the tooth be ſo corrupt, that the nerve be corroded; and if ſo be, the beſt way is to pluck out the teeth, like as many now doe, who doe but unskillfully and ignorantly, for every ſmall dolour or griefe, ever perſwading and affirming that to be the moſt ſure and ſoveraign remedy, and oftentimes, which is worſt, they pluck out one or two of the whole teeth and leave the corrupt, as I have ſometime ſeene by the unskillfull handling of that inſtrument which is made with three branches called the Polycan:

Oyles and Liquors for the corrupt tooth.

Albuc. lib. 1. cap. 21. & 22.

Error by the Polycan.

Inſtruments

Instruments to pull out, cutt, and file superfluous teeth.



Whereby often ensueth such flux of blood, that some have dyed, or at least very difficile to be stayed: such ignorants differ much from the opinion of our ancients, who did so esteem of their teeth, that they never drew them untill they were very lose, and almost fallen of themselves. In witnes whereof, I have read that in the Temple of Apollo there

was a Turkiſſe or Davier to pluck out teith, made of lead, ſhewing us that the teeth ſhould not be plucked out til they be very lowſe and almoſt walked: but if the teeth be outwardly corrupted, and the nerue corroded with extream pain, that hardly it may be ſuffred by any; in that caſe (all other remedies ſet a part) it muſt be remoued after this maner: firſt ſcituate the diſeaſed in a conuenient place, in ſuch ſort that he may be lower than the Chyrurgion, then ſeparat the fleſh from the rot of the teeth (ſo deep as you may, then the Chyrurgion ſhal with the Turkiſſe or Davier gripe the teeth ſo nere the rot as may be, taking heed neither to gripe ouerhard, nor incline the Davier too much, leaſt he either breake the teeth, or jaw where it is fixed: pluck not with great violence, nor at one pluck, leaſt you make diſlocation of a mandible, or trouble the eares and temples: if the teeth be hollow or brittle, you ſhal put a piece of linnen cloth or thin lead betwixt the Davier and teeth, in ſo doing you ſhall preſerue the teeth from breaking: ſuch teeth as may not be handled with the Turkiſſe, you muſt uſe a Pulſe to thruſt it in towards the mouth of the pelican: the teeth being drawn, you muſt cloſe the wound with your finger and thombe, then waſh it with Vrecrate and a little ſalt: if there be flux of blood, you ſhall apply a little aſtringent poulder vnto Cotton, and put in the hole, or Cotton that hath been wet in iuice of Lymons. It happeneth oftentimes that diuers of the teeth are lowſned & fallen out, either by ſtrokes, falles, or defluxion of humors from the head, with great deformity, impeding the pronounciation of the ſpeech: for remedie whereof we make artificiall teeth of Ivory, Whales bone or hounds teeth, which ſhall be faſtened by a wyre or thread of gold, paſſing the wyre or thread betwixt the whol teeth on either ſide nere adjacent, then put the artificiall teeth in the part, then knit the thread faſt, throughout about the ends of the thread, and cut it ſo nere as you can: if any portion reſt vncut, paſſe it betwixt the whole teeth, that the tongue or lippes be not hurt by it. I am not manefull to inſiſt in this matter as I might, becauſe it is

Meſues de a gritud dent.

Paul. li. 6. ca 8

Celſ. li 7 ca 12

Albuc. lib. 2. cap 33

The artificiall tooth.

ſo well

seldome practised. It happeneth sometimes that two teeth doe spring from one root, which is a great deformitie, and often offends the tongue within, or the lips, sometime one tooth is longer than the rest: for the cure of both, you shall cut them with Tenals incisives made purposely for that use: sometime the teeth doe grieve and grinde by repletion of humors from the head, debility of the nerves which moveth the chawes, by worms in the stomack, or intestines, or rotten humor in the stomack, for the which purge the stomack and head, rubb the neck behinde with the oyl of Aspicke, and Cantonnit: the teeth sometime doe tremble, chiefly the incisives which have but one root. The cause proceedeth of over great store of humidite which falleth on the gums, as happeneth sometime to such as doe sweat of the frenesie themselves, in the which the teeth not only trembling, but often fall out: for the remedy whereof, medicaments astringents, & drying must be used, such as Alom, Nuts of Cyprus, roots of Bistort, red Roses, and such like, of the which you may make a decoction: also water wherein hot Iron hath been quenched, called *Aqua ferrata*, rub the gummis and roots of the teeth therewith: you may also for this purpose use a little Alom water, or a little Salt that hath been melted in the mouth: these things doe dry up the humiditie, but you must beware in using over-dry and astringent things, and such as doe break the teeth, as Nutgals, Pomgranats, and other of like quality. Sometime there happeneth a rapidity in the teeth, which doe proceed of some astringent or sharp humor, either at the roots of the teeth ascending from the stomack: it happeneth also by imagination or apprehension, as when the sick teeth abhorr eat sower fruit, or any thing that is sower or sharp tasted: for remedie whereof, keep warm wine in the mouth with decoction of it, or hath milk: eat Raisons, and rub the teeth with kirnels of common Nuts.

Paul li 3 ca 26.

Aspion ferrum Neapolitanum.

Paul loco citat

O 2 CHAP-

Chapter XXXI.

¶ Shewing the way to helpe the mouldy, black, hollow, or evill favoured tooth.

The teeth groweth black, mouldy, hollowe, and evil favoured, either by rotten humors fallen from the braine, vapours ascending from the stomack, by receiving the fume or vapour of quick-silver, sleeping with open mouth, or by not cleansing the mouth, tongue, teeth, halse, and breast; in the morning, by spitting out of that which was collected in the night: For remedy wherof, you shall with a proper instrument of iron, rase and rub away such scurffee, mouldinesse and filth which is about the teeth, thereafter wash the mouth and teeth within with wine wherein hath been boyled red Roses and Sacrubium, then dry them wel with a cloth: then to make them white, you must use sharp drying things which have a virtue deterssive, for the which I do use the oyle of Vitreoll, Solphure, strong water which the goldsmiths do use, wet a little stick like a Goose-quil in either of those liquors, and rub the teeth therwith twice or thrice, and they will become white, beware in touching the flesh about the roots of the teeth, for these liquors doe corrode the flesh: this being done, rub them with Rose-water, the roots of Aristolochia rotunda, or Althea: if you like rather other remedies than chimical oyles, use either of these following: Take the roote of Aristolochia rotunda, and burn it with a little Hartshorn, Mastick, Salt, and some honey, wrap them within Sage-leaves, and burne them to ashes, put all in fine powder and rub the teeth therwith, otherwise take white Corall, Parble and burnt Salt, of each 2 drams, Cloves 1 dram, make of these a fine powder to rub the teeth. Or this, take the bone of Fish, Hartshorn and Barley flower, of each 3 drams, Aloe, *Aristolochia*, of each 2 drams, shells of Oysters and Egs burnt, of each 1 dram, put these in fine powder, and use

Cure.

Liquors to make white teeth.

Mesues de a gutad dent

Pa li 3 cap 26

uſe as the former, or this which I doe ever uſe: Take white bread, Coſtall, Harts-horne, of each one dimid. unc. allom 1 dram, Sage, and Roſes of each one halfe a handfull, Oyſter and Egge ſhelles, of each one two handfuls: put all in fine powder, and uſe it for the teeth: or this, Take two ounces of the powder made of cannell, cloves and mace, of each one dim. drag. Calaminth, Aromaticke, roſe of Cytron, and yeons of Florens, of each two ſcruple: incorporate all with fine honey and vinegar, and make a paſt in forme of an Oppiate to rubbe the teeth morning and evening, then waſh the teeth with claret wine, and rub them with a peece of fine Scarlet that hath beene dyed in graine, and wet in Vinegar Squiliticke, or this, *Rec. Corallorum, Rubrorum, Bole Armenici, Thuris, Margaritarum, Sanguis Draconis, Corticis Cancrorum, ana pugil.* 1. *Miſce & fiat pulvis.* Or this, *Rec. Corallorum Rubrorum, Oſſium Dactylorum, Pumicis, Oſſium cepia, ſalis uſti; ana, quantum ſufficit:* or this, which was uſed by Meſſilina Auguſta, prescribed by Scribonius Largus. *Rec. Cornuum Cervi uſturum in olam novam ad cinerem redactorum, unc.* 1. *Maſticis, unc.* 1. *Salis Armoniaci, 6. Drach. Fiat Pulvis:* Alſo this Lavement which comforteth the Veins, fortifieth the teeth, and maketh the mouth ſmell well; firſt you ſhall waſh the mouth with Vinegar, or Wine, wherein hath beene boyled Anniſeedes and Cloves, then rub the teeth with the leaves of Sage, ſhell the skins of Citron, and make a ſubtle powder of Cloves, Nutmegs, and juice of Florens and rub the teeth: or this, which is moſt good for comforting the head, making the breath ſweet, purgeth the gums, and rootes of the teeth, take Vinegar, Squiliticke, well water, or fountaine water, dim. English pint, Roſe water, Maſticke, Bol armenici, Dragon blood, and burnt Allom, of each dim. ounce, Cynamon, 4 dram. mixe and boyle all at one ſoking fire, a quarter of an houre, adding thereunto 4. ounces of purified honey, make a decoction to rubbe and waſh the gummes before and after meate: the Vinegar

Fumazellus.

Bairus.

Meſſilina Auguſta.

Squiliticke is good for the teeth and gums, it hath a mightie vertue to comfort the teeth, and tye the gummes: sometime there happeneth holes in the teeth without pain, and yet unseemly, being commonly blacke and filled with filth, which maketh evill smell: for remedy whereof, you shall take burnt Allom, Myrrh, and Mastricke, of each dimid. drag. incorporate all with white Virgin wax, and fill up the hole, or corroded part, the which you may take out, or put in at your pleasure. Those be the most common remedies which I have ordinarily used and seene practised, so it may suffice in this place, by reason I am to intreate further in my Booke of the Infantment; besides, there be infinite good remedies set downe for this purpose by Vicerus Rundoletius, Alexis Bairus, Fumanellius, and divers others, whose helpes the skilfull Chyrurgion may use.

Chapter XXXII.

¶ Of the superfluous flesh, which happeneth at the root of the teeth, called *Epaulis* and *Paraulis*.

Definition. *Paul. li 6 ca 27 Bacca lib 2. de Consen. Med*

Epaulis, is thought by our Ancients to be a tumor, or excrescense of flesh, that cōmeth at the roote of the teeth, chiefly betweene the Molares, it doth augment by little and little, and augmenteth sometimes to the bignesse of a hennes egge, accompanied with fever and dolour: the cause proceedeth, of a sanguine, cholericke, or a sharpe biting humor, which commeth from the head, also evill rotten vapours ascending from the stomacke, and corrodes: the Gummes as happeneth after rotten fevers, or evill ulcers in the mouth chiefly, of such, who have not beene well cured of the French sickneſſe.

Cauſe.

Signes.

The Signes are manifeſt to the sight, accompanied with

with feuer and dolour, as saith Avicen.

The Iudgements. It groweth to such greatnesse, that oftentimes it putteth the teeth out of their owne place, sometimes it possesseth both the iawes in such sort, that the sicke can neither open nor close his mouth, sometimes it is dolorous, blacke, hard, and skirrous, and in that case you must beware to irritate, or use caustick remedies, but onely medicaments, refrigeratiues, desiccatiues, and mittigatiues of paine, as you haue heard in the Chapter of Schirre, Iudgements. *Paulus lib. 6. cap. 27.*

The Cure consisteth first in the euacuation of the euill, sharpe and rotten humor, then use desiccatiues, and discutients, in the which if you profit not, you must apply caustick powders too, to consume the superfluous flesh: If it neither dissolue, nor can be consumed with powders, you shall use incision, if the excrescence be soft and tractable, cut away the most part of it, and consume the rest of it with powders, and produce the cicatrice with such gargarists as you shall heare in the Chapter of Vlcers in the mouth: if it be very bigge, and may not be taken away at the roote, yee shall knit the excrescence with a strong thread, then tye it faster and faster euery day, untill such time it be cut, and fall away of it selfe. I haue found this Ligature more, sure then cutting, neither so much to be feared, for flux of blood, or inflammation: that which doth remaine after the fall of the thread, you shall consume with powder of Mercurie, allom, Vitreoll, and such like: If it be residue, as oft happeneth, you shall knit it at the roote as before, and cauterize it with actuall cauter, oyle of Vitreoll water of separation used by the Gold-smithes, and such others of that nature. As touching Paraulis, it is an inflammation in some part of the gummes: for the which you must use discutients, and if it dissolue not, but commeth to suppuration, it must be opened with diligence, for feare the gummes be corrupt, which if it so happen, touch the corrupt part gently with oyle of Vitreol, or strong wa- Cure. *Aëtius serm 2. cap. 24. Gal. 6. de comp. med cap. 1. Avicen. lib 2. cap. 1.* *Paraulis.*

ter. The form of the opening muſt be with a Biſtory curb, making the overture reaſonable bigg, thereafter waſh the mouth with Claret wine, wherein hath been ſodden Parrubium, then ſtay the flux of blood by ſuch means as you had heard in the Chapter of corrupt Teeth, cleanſed with Hony of Roſes, ſtrong wine, and Sarcacolla uſe Gargariſes, Deterſives, add Deſiccatives, as you ſhal hear in the next Chapter.

Chapter XXXIII.

¶ Of Puſtules and Ulcers in the mouth.

Definition. *Gal. 6. Meth. cap. 4.*

Thoſe Puſtules and Ulcers which oftentimes poſſeſſe the upper part of the mouth and gums, are named by the Greeks *Aphthæ*, and by Avicen *Altella*, in vulgar the Water Canker, and are of a white fiery quality, for the moſt part incident to young Children, ſometime to thoſe of elder age.

Cauſe. *Galen loco citato. Avicen ſexta tertii cap. 23.*

They doe proceed either of corruption or acrimonie of the milk which the child cannot digeſt; Alſo by corruption of humors in the Nurſe. It happeneth to thoſe of elder age, through abounndance of vicious corrupt humors which flow to the mouth; alſo by the acrimonie and bitterneſſe of the nouriſhment which we eate and drink.

Signes. *Actius ſerm. 3 cap. 39.* Judgement. *Paul. 1. cap. 10*

The Signes are evident to the ſight, and are knowen by the colour. Thoſe which doe proceed of blood, the colour is red, hot, the part tumified; if it proceed of Flegm, the colour is white, with little dolour; if of choller, it is ſawnish coloured, with ſom tumor, punction, and heat; if of Melancholie, the colour appeareth blackiſh, which is woſt of all: thoſ which be black and ſcurffie like the cruſt of bread, it ſheweth great corruption and aduſtion of humors, very dangerous, and for the moſt part deadly: thoſe which be red or white, are not malignant: ſuch as are ſuperficial, are eaſily cured, thoſe which penitrat more profunditie, are difficile.

The

The Cure conſiſteth in evacuating the evill humors which is the cauſe, then preſcribe a diyet to the Nurſe that is colde and humide, to correct the acrimonie of the milke, cauſing her to uſe ſuch things as the childe cannot take, which ſhall be done by the advice of the skilfull Phyſition, rub the childes mouth with juice of Lettice: If thoſe Vlcers be very humide, take Myrrhe, nutgals, the barke of Incenſe, bruiſe all well together with a little redde Roſes, and annoynt thoſe Vlcers: or elſe waſh them with Wine, and a little powder of Galls, barke of Granads, and a little Allom: If the Vlcers be white, take Myrrhe and Saffron, of each one drag. white Succorie two drag. beate all and apply on the Vlcers: If the Vlcere be blacke, touch them with a little Roſe-water, wherein hath beene diſſolved a little Eye-Copris, called *Calcanthum*: for theſe Vlcers I doe commonly uſe a Lavement which is made of Sage, Iſop, Woodbine, Pimpernell, *Burſa Paſtoris*, and Myrtle leaves of each halfe a handfull, boyle all in running water, adding thereto honey of Roſes, and boyle it till halfe be conſumed, putting thereto a little Diamyrron, waſh and rubbe the childes mouth twice or thrice a day therewith. I doe alſo uſe ſometime for this purpoſe Plantine water, Syrupe of Roſes, with a little Romains Vitreoll, and annoynt the Vlcers gently therewith, with a ſmall linnen cloth, or a pece of Scarlet, twice or thrice a day, with ſuch other remedies as you ſhall heare in my Booke of Young Children.

Cure. *Leonel. Faven. de medendis morbis.* *Meſues de agritud. Oris.*

As for the Cure of thoſe in elder age, after purgation be uſed according to the humor which domaines, you muſt let blood in the cephalicke vaine, thoſe of the tongue and under the lips, Ventoſes on the ſhoulders, and Gargariſes, ſuch as this, take an handfull of Barbarie, Plantine, *Burſa Paſtoris*, Roſes, Violet, Chesbow, of each a certaine quantitie, boyle all in water till the halfe be conſumed, add to it honey of roſes, or Syrupe of roſes, with a little allom. If there be putrefaction, ad a little *Calcanthum*, or *Ægyptiack*; otherwiſe, uſe

Cure.

uſe this, Take decoction of Barley, Pimpernell, Plantane, Agrimonie, or Roſes, of each foure ounces, make a decoction, in the which you ſhall diſſolve honie of Roſes, and Diamorzon, of each half an unc. waſh the Mouth and Ulcers therewith: the Ulcers then being ſo cleanſed, waſh them with ſtilled water, Plantane, or ſome Roſe water, and Allom mingled together, with thoſe waſh the Mouth twice or thrice a day by which meanes they will cicatrice and heale.

¶ Of the deſeaſes and paſsions which befal the Tongue.

Definition. *Conſtantine.* *Gal. lib. 11. de uſu partium.* *Glen 4 de ſum.*

The Tongue, which is called by the Grækes *Glotta*, in Latine *Lingua*, is the inſtrument of ſpeaking and taſting, as ſayth Conſtantine. It is compoſed of an hollow and ſpungious fleſh, to the end the ſaviour & ſmell may paſſe and come the eaſier to the nerves, which make the taſte. It hath divers nerves for ſæling and moving with divers vaines and artiers full of blood, for which it is red coloured, and ſerveth for divers uſes: as alſo ſubiect to divers paſſions, as Tumors, inflamation, Ulcers, Apoſthumes. Pyurites, difficultie of ſpeech, called *Difficultas loquendi* by the Latines, and by the Grækes *Mogilalos*, lilping in ſpæch, called by the Latines *Blæſitas* and by the Grækes *Traulotis*, which is when one cannot pronounce certaine Letters in ſpeaking, as R. and L. Panting called by the Latines *Balbuties*, and by the Grækes *Pſellos*: which is, when one cannot pronounce the words, except they omit ſome ſyllables. *Haſitantia linguæ* called *Iſſenophania* in Græke, is when one cannot conſoyne and aſſemble the words together: as for *Ranula*, you ſhall heare in the next Chapter; Ulcers you have heard: as for the Cure of the reſt you ſhall heare in the Treatiſe intituled The poor mans Guide. Heare I am onely minded to ſpeake of thoſe two which are moſt common and difficile to be ſuffered, to wit, the retraction or ſhortning

of

of the tongue called the *Phylit*, and the tumor or excreſcence under the roote of the tongue called *Ranunculus*. The retraction or tying of the tongue, called by the Latines *Ligatio* or *Abbreviatio linguæ*, and by the Greekes *Ankyloglesſon*, is when the ligament membranous of the tongue is ſhorter then it ſhould be, either impeding the ſpeech or pronunciation; the which happeneth by nature or by accident. By Nature as we ſee in young children; by accident as happeneth in wounds ulcers, or hard Cicatrices, in thoſe parts: that which happeneth by nature, divers learned men have diverſly practiſed for the help thereof; amongſt the which Avicen is of opinion to paſſe the needle and a ſtrong thread, under the ſinowe or ligatour membranous or hard cicatrice, then tye it harder every day till it fall off it ſelf, as you have heard in the Chapter of *Paralis*, Langfrancus counſaileth to cauterize it with an actuall cauter, which opinion hath beene followed by ſome. Although I doe not approve it, but have ever followed the opinion of Albucaſis, which is firſt to ſituate the childe commodiouſly, then cauſe one to holde open his mouth lifting up his tongue, with the finger of your left hand, then cauſe one to holde his finger by the other ſide or roote of the tongue, ſo you ſhall ſee perfectly the ligament, then with your Inſtrorie, or ſharpe Siſſers make your inciſion overthwart the ligament membranous, in ſuch ſort, that the tongue be made free to move voluntarily, then rubbe it gently with a little Roſe water every day twice or thrice as ſhall be expedient, paſſe your finger ſoftly upon the wound with a little honey or ſirupe of dzie Roſes, that it grow not together againe: if your retraction proceede of ſiccatrice, make your inciſion more large, and conſume the hardneſſe of the ſiccatrice, then hold a roll of fine ſmall cloath faſt in the wound for certaine dayes, the which may be wet in honey or ſirupe of Roſe, that it doe not conſolidate over ſoon; if there happen flux of blood, as I have often ſeene, you ſhall uſe ſuch remedies as is ſet downe in the Chapter of corrupt Teeth.

Pau. lib 6. cap 29.

Celſ. li 7 ca. 12

Avicen.

Lanfrancus.

Alb. li 2 ca. 34.

CHAP-

Chapter XXXV.

¶ Of the tumor under the tongue, called *Batrachus* in Greek, and *Ranunculus* in Latine.

Definition. *Paulus lib. 3. cap. 16. Albuc. lib. 2. cap. 35. Aetius serm 8 cap. 37. Avicen.*

RAnunculus is a tumor on the vaines under the tongue, or an excrescence of flesh which impedeth the naturall operation of the speech: it groweth sometime to such bignesse that you would think it another tongue, it happeneth to young Children, as also to those of elder age, in such sort, that the voyce sometime intercepteth. The Cause of those tumors is a flimie pituitous, and viscous humor, discending from the head: sometime it is no humor, but excrescense of flesh, caused as other excrescenses in other parts, the humor is for the most parts involved in a bagg or chest, like Atheroma, the which is both in colour and consistence like the white of an egg.

Cause.

Paulus lib. 3. ibid. Avicen. tertia tertii, cap. 17.

Signes. *Avicen loco citato.*

The Signes are evident, and for the most part it is both in colour and figure like unto a Frogg, called Rana, whereof it taketh the Name: it is accompanied with great tumor, chiefly of the Veines under the tongue.

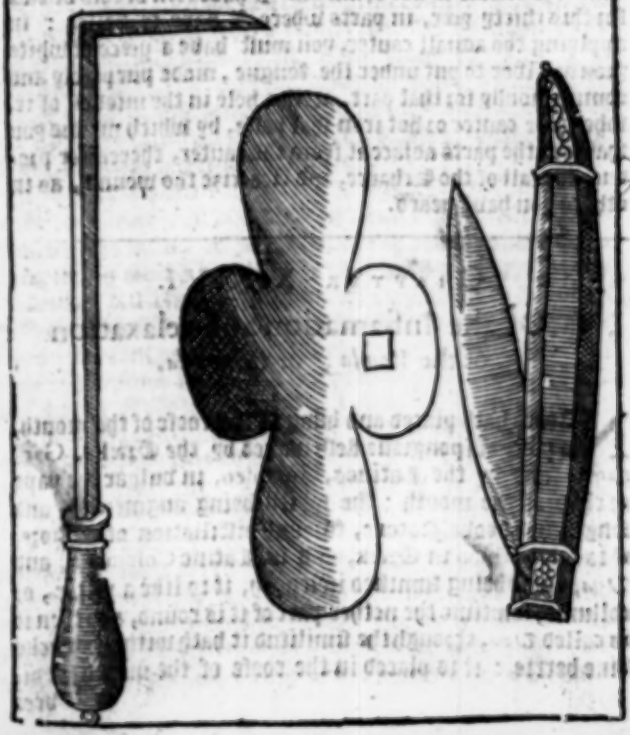
Judgement. *Alsar. loco citato. Brunus lib. 2. cap. 3. Rasis de morb part li. 2. ca 37. Trall 6. de decora Avicen sexta tertii, cap. 18. Aetius loco citato.*

The Judgements. It is sometimes so big, that the mouth cannot containe it with the tongue, in such sort, that if hastie remedy be not had, the sick doth suffocate, and sometime in opening of it, the sick becommeth mad: if it be black, brownish, hard, and insensible, touch it not, for it is cancerous.

The Cure. First consisteth in purging the head, and if it happen in young Children, you must first allay Gargarisis resolutives, incisives, and Styptickes, like as of Origanum, backe of the Granad dragagant, as oftum, and such like also rub it long with Sal Armoniac and Walls, or Sal Armoniac, Flore aris, with Dragagant: if by these meanes you profit not, you must come to the manuall operation, which

which is thus done, first place the sick commodiously, then cause one to stand behind him, and one of his hands upon his forehead, the other on his chin to hold it down, and open the mouth, then the Chyrurgion shall open the veines under the tongue with a Launce, next open the tumor, either by bistorie or cauter actuall. And

Instruments to cauterize and open the ranula vnder the tongue.



And evacuate the humors by degrees: next vse gently the same with vinegar and honie, or wine and honie, cleanse it with gargarisms made of decoction of Barley, Roses, Plantine and Honie, or syrrop of Roses, as aforesaid: if any thing remain either of humor or bag, you shall abolish it with Sal Armoniacke, Floscris, and other Cosmetes: sometimes the humor is so malignant that oftentimes we are constrained to apply actuall cauters or irons, and scarifications, yea in stile of Surgerie, or corroding the malignitie, and impalling it to be resolue, as sometime happeneth, yet not often, because the disease is not common. I have seen of this disease for this thirty yeer, in parts where I have travelled: in applying the actuall cauter, you must have a peece of white Iron or Silver to put under the tongue, made purposely and commodiously for that part, with a hole in the middest of it, where the cauter or hot iron shal passe, by which means you shal saue the parts adjacent from the cauter, thereafter prouide the fall of the Scharre, and cicatrize the wound, as in others you have heard.

Actius serm. 2 cap. 37.

Alphon. Fonseca Neapolitanus lib. de ligno sancto.

Chapter XXXVI.

¶ Of the Inflamation and relaxation of the *Uvula*, or *Columella*.

Nature hath placed and hung in the roofe of the mouth, a peece of spongious flesh named by the Greeks, Gargarion, and by the Latines, Gurgules, in vulgar the pape or chap of the mouth: the which being augmented, and lengthened above Nature, through distillation of humors, it is called Schion in Greek, and in Latine Columella, and *Uva*, for it being tumified in length, it is like a pillar, or collume, sometime the nether-part of it is round, and then it is called *Uva*, through the similitud it hath with the blacke vine berrie: it is placed in the roofe of the mouth for di-

Gal. 6. de comp. med. per loca cap. 3.

Rhasis meth. curan. morb.

vers

bers reasons: First, it helpeth to pronounce the sound, and to speak clear by dividing of the ayre which cometh from the lights, for the which it is called *Pleatrum vocis*. Also that the ayre which cometh by the Mouth and Nose, entreth not in the lights by the Drake-arterie, till the coldnesse of it be corrected, so that the lights be not offended by cold. Such as hath the pappe or pellet, hath ordinarily distemperature in heate, with refrigeration of the loines: it doth impeach that neither dust nor rheume entre in the drake arterie with the ayre. *Brunus lib 7.*

The Cause is either external or internall: The Internall are hot humors which come from the head and cause inflamation, and vapours ascending from the stomach, as happeneth in rotten stomachs, also abundance of blood. The Cause Extern, drinking of strong wine, eating and drinking of bitter and sharp meats raw, hasty excessive eating and drinking at immoderate times. Cause. *Actius serm 8. cap. 40.*

The Signes are evident to the sight, by pressing down of the tongue, accompanied with colour, tender, difficulty to swallow the meat. The sick thinketh ever to have something in his mouth, he is loth to go about with great haste by the continuall distilling of the humor, impeaching to talk but with open mouth, sometimes it hangeth so long that it falleth on the tongue, and so gives both the sicke, that sometime here constrained to put his finger in his mouth to help the over-going of the meat, as saith Avicen. Signes. *Actius serm 8. cap. 45. Gal 6 accomp. med. cap. 3.*

The Judgement, sometime it groweth to such bigness that it stoppeth the throat, and causeth the sick to suffocate, if it be not quickly cut: If it be altogether cut or fall away, the sick altogether waxeth sick, or else speaketh so that he may not be understood, and that drink which he taketh, doth for the most part avoyd at the Nose, as I have often seen. It happened to me at Paris to have a Chance of Saint Antony, who had a certain disease in his mouth, by the which he lost the pellet of his mouth, whereby he became dumb, and that drink which he ever drank, he did avoyd Judgements. *Hippo* in his Prolages.

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the moſt part of it at his noſe. Such as have the pappe or pellet great, long, and tumified, have their voyce ſo broken, that hardly can they be underſtood, or at the leaſt doe ſpeak
Tra. lib. 1. through their noſe. That which is black, browniſh, inſenſible, and dolorous, may not be touched, for either they become carſanvovatous, or great flux of blood enſueth, ſo in that caſe it ſhal be beſt to apply remedies that have the vertues to refreſh and comfort the part, and pacifie the paine.

Cure. The Cure conſiſteth in purgations & Glifters, bleeding of the cephalick vaines, armes and vaines under the tong, ventoſing in the neck & ſhoulders, with ſcarrification, frictions, gargariſes, deterſives, refrigeratives, aſtringents, with good diet, tending to cold and drie, uſing meats of good digeſtion, abſtaining from al ſtrong drink, waſhing often the mouth with this gargariſe made of Plantane, Barley,
Rol. li. 2. ca 17. *Burſa Paſtoris*, the bark of Pomgranet, ſeeth all in water, and add thereto a little ſirup of Roſes, of Violets, with ſome Gumm of Dragagant, and Sarcacoll; otherwiſe you may only uſe to waſh the mouth with Plantane, Roſe, Hſope water, and a little Vinegar, hold a little of it in your mouth a pretty ſpace. Allom water is alſo good for this purpoſe: Or this powder made of Allom Balauſt, *Terra Sigillata*, red Roſes and Sugar, make all in fine powder, and put in a little Inſtrument formed like a ſpoon, put it in your mouth in ſuch ſort that the pap dip in it and receive the powder. After the ſame ſorm you may take brayed Pep-
Rondolet de morb curan. per and Salt mixt together. Alſo Salt dried, and put in a little pocket hot in the hole of the neck, ſome uſe hot bread to put in the hole of the neck.

Celſ li. 6 ca 14 Celſus counſaileth to take a powder made of Allom, *Squamma aru*, Gall, Myrrhe, mixed with a little ſad Claret wine and applie to it: ſometime being tumified, it tendeth to ſuppuration; if ſo, it muſt be opened with a Launcet, and cure it with Gargariſes, as other Ulcers in the
Lanicerus de expli. morb. mouth: If by neither of theſe remedies the griefe doth diminiſh and goe away, you muſt hazard either cutting, knitting,

ting, or corasives to consume it, otherwise the sick doth often times suffocat and die. The best remedie that I have found in this, is, first to place the sicke in some light part, open his mouth, and hold downe his tounge with a *Speculum oris*, thereafter cut a little of it with sharp sheares, then wash the mouth with Orecreate or some astringent water mixed with sad Claret wine, and some astringent powder: if there be fluxe of blood, stay it by some causticke powder. Some for this purpose do use the ligature, as you have heard in the Chapter of *Epynyctis*, the which is sometime dangerous for great flux of blood: others doe apply actuall canters which sometimes I have seene used in the great Hospitall of Paris, called Our Ladies Hospitall, but with very evill successe; so by my advise assay it not, in case thereby you incurre rather pain, than profit. I have sometimes canterized the Uvula with a little oyle of Vitreoll, strong water, or Canter potentiall, put either of these in a little instrument, and let the end of pellet or Uvula tramps in it: so that which is superfluous shall consume and fall away, then wash your mouth with warme wine or Orecreate, and use Gargarises, as is before mentioned.

Alb. li. 2. ca. 37. Lanfrancus. Celsus li. 7. ca. 12.

Chapter XXXVII.

¶ Of the tumor or Aposthume of the Amigdals, called by the Greeks Paristhmia, and by the Latines Tonsillae.

Nature hath placed in the two sides of the Uvula, somewhat behind, two little glandes which are spungious, one on every side to the greatnesse of an almond, for the which they are called Amigdals: their office is, to receive the humiditie which distilled from the braines, to the effect the parts of the mouth may be humected and refreshed: as also the trachea-artery e tongue, in such sort that the tongue in speaking be not over-dric, and empaih the pronunciation

Gal. 3. simpl. caus. ca. 4. & 2. de usu part. & aph. 26. lib. 3.

Cause.

The Cause, is great abundance of viscous sharp humidity which commeth from the head, also drinking of strong and fumous drink, walking abroad morning and evening when the dew falleth, great abundance of blood: it happeneth sometimes by Children through the bitterness of milk.

Ra. li. 2 ca. 15. Gal 6 de comp. med. per loc. cap. 3.

Signes. Judgements. *Avicen nona 1. 2. 1 cap. 5 Alb li 2. ca 36*

The Signes, are evident to the sight, in pressing down of the tongue. The Judgements, are diverse, feaver, accompanied with sharp inflammation, that sometimes it stoppeth the passages of the meat and drink, as also the respiration: so that the sick can neither take over the meat, nay respire, but doth suffocate, if hastie remedie be not had, as saith *Albucasis.*

Signes. *Actius Serm 3 cap. 45. Rou. meth. curand morb. Celsi. li 6 ca 13. Pa. li 6 ca 30. Hip pro 3. cap. 6. text. 13. Meseues de egritud guttur.*

The Cure, consisteth in good diet, eating little, of good digestion, abstain from all strong drink, use Clisters, binding the arme and veins under the tongue, Embrocations, frictions on the neck and Shoulders, gargarisms, refrigeratives, and vesicatives: If it apostumate as often happeneth, it must be opened with a Launcet, if the tumor doth so augment that the sick be in danger to suffocate, you shall make incision in the trache-artery, after this sorte, lay the sick on his back, thereafter lift up the skinn of the trache-artery, with thy hand, and cut it in length till the membrain be discovered, then make your incision with a bistorie in the said place, thereafter put in an hollow tent of silver, gold, or lead, with a broad head well tight, that it go not to the lyghts: after the danger of suffocation be past, use syrups of honey and Roses to cleanse the wound, take out the tent and conglutinate the wound, and in all this time use externall medicaments about the neck made of Barley-flower, Lyn-seed, and Fenugreek, with such other things meet, according to the degree of the maladie: In this case I doe often use this remedie, which hath the vertue to close the soft parts, and dry up the humor pituitous which is fallen on the part, and hath the vertue to soften the glandes intern, and is thus made; *Rec. Nidi hirundinis unc. 3 pulveris uncum expressi unc;*

Rand de cura. morb.

ther to *Resolution* vse, I *semi*, *accipiantur cum oxymellite fiat cataplasma*. This infition is very dangerous, not being rightly done, by reason of the flux of blood, which often happeneth: likewise for the nerves which palleth that way. I cured an Apothecarie in Paris after this manner; some doe vse to knit these glands, as you have heard in the chapter of *Epulis*; others doe consume them by actuall cauters, others pull them away by Crosslets and other instruments, either all whole or by peeces, which from *Albucasis* alledged to have done to an old man, who had almost suffocated, but of the event of the cure he maketh no mention: sometime the tumor is malignant, which shall be known by the hardnes, lividitie, colour, inequalitie, greatnes at the root, of the nature of *Cancer*, which must not be touched, but vse remedies palliatives, as you have heard in the Chapter of *Cancer*.

Trall fol. 177.

Pa. li. 6. ca. 30.

Alb li. 2. ca. 36.

Signes.

Chapter XXXVIII.

¶ Of the tumor in the throat, called by the Greeks *Synanche*, and by the Latines *Angina*, or *Strangulatio*.

Definition.

There chanceth in the throat many greivous sicknesses, but here only I minde to speak of that which is most dangerous, called *Angina*, which is an apostume or inflamation of the interior muscles of the throat, whereof there are four kinds. The first, is great inflammation in the throat. The second, is an humor contained behind the Amigdals, which sometime doe hinder the swallowing of the meat, and oftentimes doth suffocate the sick. The third, is great tumor and inflamation towards the chinn, both externally and internally. The fourth kinde is, when the vertebres of the neck goeth out of their own place, whereupon the tongue removes from the proper scituation with great difficultie to breathing. The cause of it, is either

Hip prog. & comp. 34.
Pa li. 3 cap 17.
Rol li 3 ca. 15.

Difference.

Gordon. par. 4. cap. 1.
Aëtius Serm. 2. cap. 47.
Trallian. lib 4. ca 1.
Gal aph. 4 ca. 34 & li 2. 67.

sect 1.

Cause.

cold ayre, usage of cold drink, with abondance of cold weak humors and vapours, not only of all the whole body, but of the head and parts next to it. The Signes, are difficultie of breathing, fever, heat, inflamation, and dolour in the throat. The Judgements are these, if it come suddainly through a fever, without any outward appearance, in the neck, it is mortall. This happeneth seldome to young children, except when the vertebres of the neck goe out of their place, and then they receive no cure. The Cure consisteth in Generall and Particular remedies. The Generall, shall be in good forme of life in the 6 annaturall things, eat and sleep little, and drink only Tysan, use oft Glisters, and purgations, pilles, blood in the vain Cephalick in both the armes, as also those under the tongue. The Particular remedies are frictions, ventoses, with scarrification on the shoulders, with application of hot bread on the neck to divert the humor, with this liniment (to rub on the neck) made of unguent refrigerant *Galeni*, oyl of Cammomill, Violets, and Lillies, with a little hens grease, thereafter apply these warm as it comes from the sheep. Gargarize the mouth with Planting water, Winegar, and Whey; or with this which followeth made of Barley, Pimpernell, Carbell, of each a little, seeth all together; and after the ebulition put to *Diamoron*, and honey of Roses, *Alexis* alledged to have cured it only in three hours, by applying one pound of *Aqua Sithisa*, with an unc. of *Aqua vitæ* mixed together. *Paulus* and *Mesues* have obtained divers remedies for this purpose; also this Gargarism is good. *Rec. Aquæ solani, Plantaginis, caprifolii ana lib. semi. Diamoron unc. 3 fiat gargarisma.* If the tumor turn to suppuration, use this gargarism, take the roots of Mallowes, Althea, Borrell, and Lyn-seed, of each one a little, boyled all in Cowes milk, putting thereto a little of the mucilages of Plyton, which you shall hold a certain space in your mouth warm. The matter then being come to maturitie, open it with a Launcert, then use this

Paul li 3. ca. 27 Gal. ad lib. 4 ca 35. *Mesues de angin. gutt.*

Signes.

Judgement. *Hippocrates. Paul. li. cita. & 4 de morb. acuta text. 36. Avicen nona tertii cap 9 Gal. 3. prædict. com. 16.*

Cure. *Mesues de angin. gutt. Rol. li 2 ca 15. Rol. lib. 1 cap 45. Trallianus ibi Hippo. 4 device in mor acu. Paul loco citat. Gual. b. uti praxu medi.*

Paulus ibid. Ran de meth. curand. morb.

Avicen nova tertii. cap 10.

this cleansing gargarism made of decoction of barly, hony, and sirup of Roses, for a certain space, holding it alwaies warme in your mouth: it being cleansed, you shall add to the foresaid decoction a little allom, balust, and myrrhe: thereafter siccatrize the wound, remembring all this time to keep good diet, abstain from women, and take good hèd the matter take not course to the loynes, which is most dangerous. If it happen at any time that either a little bone, or any other like thing fall in the throat, you shall hold your mouth close together, & pluck up cold water at the nose, til such time it avoid at the mouth. By this remedy I have sèn sundry helped, who have bèn troubled chiefly with fish bones: and further he may take advice with *Albucas. lib. 2. cap. 38. & Paul. l. 6. c. 32.* *Antoni. musa cap. de fiunt.* *Cels. lib. 4 ca. 4.* *Jubertus de pilarum affect.*

CHAPTER XXXIX.

¶ Of the tumor in the Neck, called by the Latines STRUMA or SCROPHULAE.

STruma is an inflamation of blòd and pituite in the soft and glandulous parts, as under the jawes, armes, at the rootes of the thighes, and in the paps. It is engendered of a rotten thick matter, and congealed blòd. The Cause is falls, strokes, or humor pituitous, mixed with melancholie: also drinking of evill waters, whereof I saw many infected at the siege of *Paris*: also by retention of the excrements of the braines, which should avoyd by the mouth nose, eares and eyes. This disease often happeneth to young children, through their great gulositie and raritie of the skin, for the which som call them *Scrophulæ*, by the similitude of a greedy Beast, called *Scrofa*. The signes are apparent to the sight: they are somtime few in number, otherwhiles many, and are covered with a membraine like *Atheroma* and *Steatoma*. The Judgements, those which are superficiall, mobile, and few in number, may resolve: Definition. *Paul li 6 ca. 35 & li 4 ca. 13. Rol. lib. 2 ca 12 Gal. 14. meth. Celf li 5 ca. 28* Cause. *Vigo ca. de tumor pituita. Theodori lib 2. Gord part. 1. cap 85 Arnald lib. 2. Arcolorii ca 5.* Signes. *Alpho de liçno sanct. lib. 2.* Judgements.

Barta Pallia.

ſuch are ſtable, hard, and maligne, doe not reſolve, or hardly receive any cure: ſuch as are great and neere the trachearteri, are difficult in opening, by reaſon of the nerves recurents, which being cut, the ſicke either waxeth dumbe or becommeth hoarſe like one that hath the cold: they are alſo difficile, being accompanied within vaines, for feare of flux of blud.

Cure.

Scribonius Largus de compo. med. Adamus Lonicerius de expl morb Avicen.

The Cure conſiſteth in remedies univerſals, & particulars, as in good regiment, eate little and of light digeſtion, and abſtaine from ſuch things as engender groſſe humors, purge often, bleed in both thy armes, and haunt dry places, thy drinke ſhall be compoſed after this forme: Take *Scrophularia* 3 parts, *Philipendula* 2 parts, *Pimpinella* and *Braſſica* of each a little: the rootes of Reddiſh and *Ariſtolochia* a little, ſeeth them all in white wine, with a little hony, till it be halfe conſumed, of this you ſhall uſe 2. ounces in the morning, every two dayes once. I have uſed to divers a decoction Lexative the ſpace of 15. or 20. dayes: otherwiſe my confection ſet downe in the Poore mans Guide, whereof I found great helpe. The particular remedies are to annoynt the part with a little ſalt butter, fried in a pan with a little Vinegar till it grow black: ſome uſe the plaſter of *Vigo* with Mercurie. *Brunus* and *Theodericus* approve much plaiſter made of Ammoniacke, and *Bdellium* reſolved in Vinegar, *Lebot* commendeth *Diaſcordium Magiſtrale*, and *Divinum*, mixed with quadruple Mercurie. I commonly uſe that cataplaſme ſet downe in the chapter of *Paraſchmia*. If it tend to ſuppuration you ſhall uſe this, take the leaves and rootes of Mallowes, Lillies, Reddiſh, Turnericks, Agroſtis, of each 2 ounces, leaves of Camomill one handfull, and make a decoction, whereunto you ſhall adde the flower of Beanes, Linſeed, and Fenigreeke an ounce, Swines greaſe that is freſh a pound, make a cataplaſme, adde unto it a little oyle of Irin, and Lillies. This remedie hath the vertue both to digeſt and ripen: when it is opened, cure it as you have heard in others.

Brunus. Theodoric. Rondolet de curan morb.

Scribon Largus de compo medica Alli 2 cap 42.

Some

some old and new Practicioners in the cure of this, doe cut away all the glands, taking heed of the nerves recurrent, which serve to the voice sometime children having scabs in their heads, the brains humid by wrong lying and taking cold in the night, have the glands tumified. For remedie whereof apply oyl of Camomill, Anu-seeds, and sweet Almonds, with a little Hens grease and butter. If the tumor be hot, add to it oyl of Roses, and Violets: also rub it with fasting spittle till it grow hot. This disease is called the Kings Evill, which is alledged by Frenchmen to be cured by their King after this form; the diseased first is visited by the Chyrurgions, who finds it to be the kirnells of Kings Evill, then the diseased is set on his knees, and presented to the King, who maketh a crosse on his forehead with his hand, saying, *Le Roy te touche, Dieu te garrie*, which is to say, the King doth touch thee, God make thee whole. *Rol li. 2 ca. 12.* King's Evill.

CHAPTER XL.

¶ Of the tumor in the neck or cragg, called *Brancocele*, or *Hernia Gutturosa*.

This tumor, which the Greeks call *Bronco*, and the Latines *Hernia gutturis*, and the Arabians *Botium*, is round and great, ingendered of the humor phlegmatique, betwixt the trache-artery and the skinn: sometime it occupieth the most part of the cragg, of the which there are divers kinds according to the matter contained therein, sometime like *Atheroma*, otherwhiles like *Aneurisma*. Definition. *Paul li 6 ca. 33 Rol li 2 ca 14. Lowerius de morb. capit. Rol li. 2. ca 14.*

The Cause is not different from these that it is like unto, yet some are externall, and some internall, proceeding of a cold and humid ayre, drinking of evill water, as those who dwel in *Pimont*, and about the Alpes are much subject, because the most part of their drink is melted snow: it happeneth also by the retention of monethly courses in women, and Hemorrhoides in men, with great repletion of the melancho- Cause. *Chalmetæus. exch. Chir. Arnald. lib 2. previar. cap. 4.*

Signes. lancholique humor in both seres. The Signes are most evident to the sight.

Judgements. *Paul li 6 cap de hernia guttur. Alb li. 2 ca 44 Theodor. lib. 3. cap. 31.* The Judgements, those that come by nature are incurable, and those which are like unto *Aneurisma* most not be touched, such as are very great accompanied with great vains, are very dangerous, and in no wise to be touched, those which be tractable must be opened by cauter or launcet, eschewing alwaies the vains.

Cure. The Cure is, first to corroborate the head with powder cephaliques, thereafter apply unto the sore a cake of lead rubbed with quick-silver, or the emplaster *de vigo*, with Mercurie, rubb it with thy hand till it grow red, before the application of the plaister, and use such things as do provoke spitting, for the which it shall be expedient to use five or sire graines of my Arabick powder, hold thy bellie loos and keep good dyet, bleed in both the armes, if the malady, intemperature of the person require. That kind of it which is like unto *Atheroma*, may be cured as you have heard in that Chapter. As for the other kinds of it, if that avayle not, you shall have recourse to my Book of the disease of Women, by reason oftentimes it happeneth to them in time of their trabailing, by stopping of them to cry in the time of their extream pain, the which Book God willing shortly shall come to light.

Bru li 2 ca. 7

Chapter XLI.

Of the tumor called *Aneurisma*.

Definition *Gal. lib tum. preternatur.* *Aneurisma* is a tumor soft to touch, the which is engendered of blood and spirit under the skin and muscles, which happeneth in divers parts of the body, chiefly in the sides of the crag.

Cause. *Paul li.6 ca.37* The Cause is either dilatation, incision, or ruption of the artery, which often chanceth to Women in the time of their birth, to Trumpetters, Criers, Watermen, and others, who use violent labour, and great crying,

or

or other violence, by the which some of the artery doth dilate.

The Signes, are tumor, impressing on with the finger, great pulsation. The tumor is of the same colour, as the rest of the skinn, soft to touch, yealding to the finger, by reason the blood and spirit retyreth unto the arteries and parts adjacent, and having removed the finger, it presently returneth with a noise or bruite, by reason of the blood and spirit that returneth. Signes. *Adamus Lmi. de explo. morb.*

This happeneth when the *Aneurisme* is done by anatomies, that is, the artery be opened and cut: When the artery is riven, as happeneth to women, and those of great exercise, there issueth forth more abundance of blood then spirit, and is more hard than the other, and maketh lesse noise in the retyring. *Gal. lib. tumor praternatur. cap. 11.*

Those which are superficiall in the exterior parts, as the head, legs, and armes, may be knit, and are curable: those which are profound and interior, in the breast, as often happeneth to those who sweat excessively of the venerian sickenesse, and otherwise: also those in the neck under the armes and roots of the thighes, and when there is great dilatation of the arteries, are not curable, but death ensueth within few dayes, or at the least are very perilous, as saith *Paulus*: and if the tumor be opened, the patient dyeth presently. Judgement. *Paul. l. 6 ca 37.*

This happeneth oftentimes by the unskilfulnes of ignorant Barbors and other abusers, who meddle with this art, who ruyne a number of People through their ignorance, as I have often seen: such ignorants do esteem all tumors that are soft, should be opened as common Apostumes.

I remember in Paris in Anno 1590. there happened such a disease to a valiant Captain (my great friend Captain Lyle, who was one of the chiefest Captaines amongst the Spaniards at Paris) on the right side of his cragg, for the which, I a Chyrurgion Major to the regiment, was sent for, and found it to be an *Aneurisme*, so not to be touched; of the which opinion was my good

friend

And ew Scot. friend Andrew Scot, who was a great Practitioner at Paris for the time, & well exercised in the art of Chyrurgery, we did ordain remedies to let the increase of it, which receipt being sent to the Apothecary, who before had seen the sayd Captain, did think it no meet medicine for an Apostume (as he termed it:) so presently he sent for an ignorant Barber like unto himself, who did sweare unto the Captain that they had sawes and charmes for all sores, so without further tryall did open it with a Launcet to avoyd the matter (as they thought) which being done, the spirit and blood came forth with such violence, that the Captain died in few houres after. I doubt not but in these Countries divers such errors are committed by ignorants. I doe use always in such, chiefly in the neck, under the armes, and in the pappe, these remedies which I have prescribed to the Spaniard, that is, first to draw blood in both the armes, then apply on the tumor *cerat Galen* or *debullo*, or this, *Rec. Pulueris subtilissimi boli armenici, sanguis draconis, myrtillorum, lapidis calaminaris in aceto extincti, absinthii, an unc.* 1. *cum cerato refrigerantis Galeni quantum sufficit, fiat unguentum.* For the same purpose I use a cake of Lead rubbed with quick-silver. These things doe let the growing for a time, although it be near the noble parts. If it happen in the extremities of the legs or armes, they may live a long time by the usage of the foresaid remedies. I knew a woman in Paris, who had a very great one in her thigh, and did live ten years. If it be little and superficial, I finde nothing better then Cataplasmes made of Claret wine, with croppes and leaves of Cypress. When the artery had bin opened in the place of the vain, as sometime happeneth, I doe knit it after this forme: first makes incision in the skin long-wayes, then discovers the artery, then passeth a Curbit needle with a double thread under the sayd artery, two inches above the incision or ruption thereof, then knits it with a double knot, voyds away the blood contained, so cures the wound.

Error committed by ignorants.

Remedies for the *Aneurism.*

Cataplasmes for the superficiall *Aneurism.*

CHAP-

Chapter XLII.

¶ Of the Tumors or Apostumes in the Pappes.

The Pappes which are glandulous parts, partly ordained for decoration, and partly to be answerable to the chambers of the matrix, and are ordained for the gention of milk, they are subiect to divers diseases, as other parts of like substance. Definition. *Galen lib. de usu partium.*

The Cause, is such as you have heard in other Apostumes, also retention of the monethly courses, or abounda[n]se of thick corrupt milk. The Signes, are such as you heard in others such like, as dolour, pricking, tention, redneſſe, feber, and divers others. Cause. Signes.

The Cure consisteth in universall and particular remedies, as purgations and bleeding, chiefly in the saphane vain, ventosing and frictions on the thigh, with scrups and other convenient remedies, for the provocation of the monthly, as you shall hear at larg in the Book of Diseases of Women: use good diet tending to humiditie. Cure.

The particulars remedies differs not from other apostumes, saving that thou use familiar & weak repercussives, because it is nere to the noble parts, in the beginning it shall be good to foment the pappe with hot water, Vinegar, and oyle of Roses: or this, Take the flowers of Camomill, Lyn-seed, and Fenegreke, of each half a pound, the juice of Mallowes, Roses, and Plantane, of each 3 ounces, Vinegar 2 ounces, wet a cloth therein and lay to the soze: if it tend to maturation, take the crummes of white bread and bean meal, of each one half an ounce, flowers of Fenegreek as much, Mallowes, Althea and Lilie roots, of each a little, seeth them in milk, putting thereto the yolk of an egg, fresh butter, and a little Saffron, make a Cataplasm and apply: when it cometh to suppuration, open it. *Paulus lib. 3. cap. 35.*

Gal lib. de faſciis. Vido vides interprete Florentino.

it with a Cauter or Launcet, evacuate the humor, and cure it as other Apoſtumes: uſe a Bandage of three ſheaves, as is ſet down by Galen, to hold it up, for great hanging down maketh attraction of humors: Labour not with that arme of the ſore ſide, for that maketh attraction of milke which letteth the healing of the ſore: ſometime womens papps doe grow very great not being ſore, which is very unſeemly, for reme dy whereof, Fallopius biddeth take the hearb *Meliſſa*, bruiſe it and apply in form of a plaiſter, which leteth the growing.

Chapter XLIII.

¶ Of the tumor in the Thorax, called the *Pluriſie*.

Deſinition. *Arnald lib 4. breviar. ca 5*

Difference. *Pa li 3 cap 32 Gordo part. 4 Avicen 13. ca. de pluri. Meſues de egritud. pector.*

Cauſe. *Ætius ſerm 8 cap. 68. Avicendecima tertii cap. 15 Gal 4 loco um affl. cap. 8*

Signes. *Gal. 5 locorum affect cap 3. Hipo o predict. 2. text 10 Roſis lib 6. de mor par. ca 58.*

Pluriſie is an inflammation and tumor, or a maſſe of blood, which turneth into a bilious matter, in divers parts, but chiefly of the membraines and muſcles, which knit and cover the ribs, whereof there are two ſorts, the falſe and true: the falſe is outward in the muſcles of the breſt ribs; and the true, is that which happeneth in the membrains, which knitteth the ribs,

The Cauſe, is erterne and interne: erterne, is great heat or cold: the uſage of ſtrong wine or very cold water, violent exerciſe, and cold ayre after great heate: the internall cauſe, is great repletion of all the foure humors, but chiefly the blood and choller, which maketh the moſt ſubtill part of the blood aſcend from cave vein unto the vaine *Azygos*, thereafter in the vaines and membraines intercoſtalles.

The Signes are great dolour, from the ſhoulder unto the nethermoſt rib, punction in the ſide, continual fever, difficulty of reſpyring, coughing, hard pulſe, great alteration, with want of appetite, evil ſavored breath, heavines, and ponderoſity of the ſides, great fever chiefly in the night, little

little sleep, some sweats which happen through the great pain.

Judgements.

The Judgements, these which cometh on the right side, are not so dangerous as on the left. If the spittle be black, livide, and viscous, with continuall cough, vehement pain, long continuing, the urine be thick, blew, or black, it is deadly: if the cough be very drie and cease not, it is an evill signe, but if the spittle be white, light and equall, with little cough, the patient sleeping well, having good appetite, and urin red coloured, it is a good signe. *Actius serm. 2. cap. 65 & aph. 10. 13. 22. 39. Avi. lib 4 Gal li 5. meth. ca. 7. & 8.*

Cure.

The Cure consisteth in universall and particular remedies: universalls, as glisters, bleeding in both the armes, chiefly in the side opposite to the sore, keeping good diet, abstaining from strong drink, Women, and perturbations of the mind. *Paul. li 3. ca 32*

Gal. 5 meth. cap. 8.

The particular remedies shall be cataplasmes, lipements made of flowers, with Cammomill, Melilot, Aniseeds, Lynseed, and Fenugreek, if the colour be great and continue. *Fuchius* counselleth frequent application of ventoses, with scarrification of the part infected. If by any of these remedies the pain doth not cease, neither you perceive any evacuation of the humor, by the mouth, urin, or fundament: It is to be suspected that it turn into *Empyem*, which is a collection of matter, betwixt the ribbs and the region of the lights or lungs, sometime with corruption of the part, for the which we make incision, for fear the lungs be corrupt and become ulcered, then the incision shall either be made by Cautre or Launcet, but rather with the Cauter, for neither doth it close so soon, nor is so dolorous: the opening shall be drit betwixt the third and fourth of the tru ribbs beginning at the nethermost and count upwards, hold you six inches from the ridg of the back. In making of your overture, which shal be either with Cauter potentiall, or Curbit bistorie, till you come to the purity within the rib: make your overture at great length, beginning above, and guiding the bistorie in by-wayes, from the thick ribb to the fourth,

fourth, eſchewing the vaines, arteries, and nerves which are under the inferiour part of the ribbe: the overture being ſo duely made, evacuate the matter by degrees, and not all at one time, for feare you diſſipate too much the ſpirits: put a tent into it with an emplaſter of *Diacalcithos*, or *Betonica*, mixed in Claret-wine. Sometimes there is a certain congealed water, gathered under the Sternum or briſket bone. For the Cure whereof, *Columbus* counſaileth to trepan the Sternum; but I rather in that caſe approve the Cauter potentiall, as counſaileth *Arnaldus*: make a good eſcharre, hold it long open.

Columbus.

Arnaldus.

This Cure is rare and ſeldome practiſed, yet after this method I did cure one John Buchan Maſter of the Song Schoel in Glaſgowe, who was heavily grieved with a watry or congealed humor collected under the ſtern, of the which he was cured perfectly.

If you ſee tumor eminent in any place of the thorax, open it in the moſt convenient place. Hippocrates doth counſaile to diſcover the third ribb, and boye it with a Trepan perforative to let out the humor, then put a hollow tent either of Silver or Lead, and let not all the matter avoide at one time but by little and little, and cure it as other Apoſtumes.

Chapter XLIIII.

Of the Tumor in the Navill, called in Greek *Axompholos*, and in Latine *Eminentia Umbilici*, or *Hernia Umbilicalis*

The Navill is the middelmoſt part of the body, where by the Childe is nourished in the Mothers womb: it is compoſed of ſinowes, vaines, and arteries, the which, when the Periton is diſtended or rent, it doth ſwell and tumifie in ſuch ſort, that ſometime it doth ryve.

Conſtantine.

Lonicerus explic. morb.

The

The Causes are divers, like as by the dilatation of Peritoneon, whereby the intestine commeth forth, or by the blood which may flow from the veins and arteries: also by wind or water in that part, and by knitting of the navill too short or too long after the birth: nere knitting, either slippeth, breaketh, or maketh convulsion, and other grievous diseases: by the too long knitting it giveth place to the intestine or *Omentum*, whereby some Blood, Flesh, Water, Wind, or Vapours, doe occupie the eminent part.

Cause.
Alb li 2 de cura eminentia numb cap 52.
Gord part 8. cap 2.

The Signes are knowne by diversitie of matter therein: as if the *Omentum*, the tumor is soft and the colour not different from the rest of the flesh: if the intestine, the tumor is soft, unequall, & returneth into the capacitie with a noyse or bruite: if humiditie or vapours, the signes are as you have heard in watrie or windie tumors: if through blood, which happeneth by the ruption of som vains or arterie, the signes like unto *Aneurisma*: if extrestence of flesh, the tumor is hard, and obeyeth not easily.

Fauentinus de med. mor. cap. de amp. numb.
Signes.
Theodor. li. 5.
Al. li 2 ca. 52.

Anton. benc de abditis morb. causis.

The Judgements are these, when the dilatation is great, it breaketh not easily, and often rivath by som violence or great coughing.

Judgements.
Pan. li 6. ca. 50.

The Cure is, first in good regiment, tending to sobrietie, abstaining from all flatuous meates, and all such as engender crudities, from moving, exercise, and such like. The particular remedies consists in emplaisters astringent, or this emplaister set downe by *Petrus Argilla*: also fomentations, astringents, and bandages, chiefly in the beginning: if that helpe not, reduce the pudding and quirke, and cause the sicke to hold in his breath till you knit the production with a ligadour, then let it fall off it selfe, and produce the cicatrize. If it be rent by great violence or cough, and the intestine commeth forth, as happened to an honest Matron in Paris, whom I cured after this forme: First, I enlarged the dilatation with a Launcet crooke, then reduced the intestine, and used the suture Pelitor, as is set downe in the generall chap. of wounds, and cured it as other wounds.

Cure.
Calf. 6 ca. 27. & li. 2. ca. 34.

Petrus de argilla de umbi.
Chalmet. ca 48.

Ra li 9. ca 72.

If

If there be wind or water in the place, you shall cure it after such sorts, as you shall hear in the Chapter of woundy or watry hernis or ruptures.

Chapter XLV.

¶ Of the tumor in the Bellie, called *Hydropsie*.

Definition. *Gal. li. 3 facul. natu. & cap 6. li. 6 5. de locis affe. Avicen 10 4. cap. 5. Arnald. lib. 2. breviar. ca. 40*

Hydropsie, is a tumor against nature, ingendered of great quantitie of Water, Winde, or Flegm, which sometimes is dispersed through the whole body, and is called Universall, otherwhiles in some part therof, & is called particular. It is most commonly in the capacity of the Periton, of the which there are three sorts, to wit, Ascites, Timpanites, and Anasarca. Ascites, is a malady that causeth the bellie and leggs to swell through a watry humor, the rest of the bodie is small and lean. Tympanites, is a malady in the which is more flatuositie and lesse humor, and in touching soundeth like a Drumm. Anasarca, or *Leucophlegmatia*, is a disease wherewith the whole body, but chiefly the privie parts, are swollen with a pituitous humor, white and clear, accompanied with feber.

Difference. *Trallian lib. 9. cap 123. Gal. com. 2. in aph. & 4. de morb. acuit. text 3. Celsi li 3. ca 21. Paul li 6. ca. 50. Roger. ca. 45.*

Cause. *Theod. part. 6 Actuarius. 10 cap. 20. Aculeus Savonnola. Gal 5. loco. affect. cap 7 Gordo. part 6 cap. 5. Avicen trast. 4 cap. 4. Gal. 5. loco affect ca ult. & lib 3. cap. 19.*

The Cause, is either extern, or intern: extern, as strokes, falls, heat, flux of blood, or great and long running of the Hemorrhoides or monethes: also through dysentery and great usage of humid meats, as soumes, water-berries, evill water, and such like, wherof we had good proof at the siege of Paris, also evill regiment. Plato sayth, that in the time of Apollo and Esculapius, neither Catarrhe, Hydropsie, nor many other diseases which now raign, were known, the which we may greatly attribute to their great sobrietie. The Cause intern, cometh chiefly by the vertue alteratrix and concoctrix of the liver, and by Apostumes of the liver, passions of the stomack, through the vice

vice of the vaines meseraicks, intestines, matrix, bladder, lights, milt, and kidneyes.

The Judgements of Hydropsies after hot fevers, or happening in fevers are evill, and if through Apostume of the liver, it receiveth no curation, or by using remedies the sick groweth better, and within ten dayes evil againe, he healed not: if the diseased become laratiu, and have no ease of his paine, or if the spittle, the breath, and excrements doth stink and sooner evill, they be all signes of death: if flux of the belly with difficultie of respiring, he dieth within three dayes: of all the three sorts ascits is the worst. Those that are young, robust, and the noble parts not vitiated, especially the liver, and may use exercise, the humor not being putrified, may be cured.

Judgements. *Tra. lib 4. Hip. prog. 2. text. 2. Gord. part. 6. cap. 5. Alb li. 2. ca 34. Hippo* in his Presages. *Hip. apho. 35. & 41. & aph. 5. & 7. Trallian. lib 9.*

Then for the Cure of such, there are three Intentions: The first, using wholsome diet tending to heate and drie, of good nourishment and light of digestion, little drink or none at all, if possible may be, and if the diseased may not part without drink, he may drink a little clean old Wine. I knew a man that was cured by abstaining only from drink halfe a yeare. Antonius Benevenius reporteth that he knew men cured by abstaining from drink one yeare, without using any other remedie. Let their bread be Barley, wherein shall be mingled the powder of Wormewood, Anniseeds, Betonie, Calamynth, *Galanga aromaticus*, Dutrozie, and Fennell, which things may also be put in their pottage. Asses or Goats milke were good to be used. The second intention is done with fomentations and unguents resolatives, as in Oedema you have heard. The third intention, is to corroborate the intemperie of the liver, as is amply set downe by Albucasis. I did cure sundrie at the siege of Paris, by a remedie which I brought from a Turk, who was bond-slave to *Dondego de varro Viador*, Generall of the Spanish regiment there, and is thus made, Take a handfull of Fennel roots, of *Appium Rusticum*, & *Eupatorium* as much, *Pseudo masculum* two handfuls. *Petroselinum macedonicum*

Cure. *Paul. lib 3. cap. 2. & lib 2. cap. 48.*

De abditis morbor. causis. Tra. li. 9. ca. 2.

Avic. 10. Apb. ca 3. tract. 2. Gal. 14. meth.

Gal. 7. ap. Comment 17 & 3. de temp. cap. 3. Alb lib citat. Haly Abbas. Guyda.

one handfull, *Hepatica* or *Herba Trinitatis* as much: of all those, take the branches and not the roots, gathered dry in the Sun, infuse all in eight English pintes of white wine, and let it seeth till three pintes thereof be consumed in an earthen pot close covered, let not the fire passe out of it: it being throughly boyled, strain it through a clean cloth and give to the sick to drink at times, in so doing he shall after three dayes take a stir of urine, which will continue fifteen or twenty dayes, in which time such as I have handled were ordinarily whole. In all this time keep them very warm, use only rosted meat of good juice and light of digestion. Some in the said disease doe counsell to make incision, the which I have often seen, but with evill successe, and not to be used, as being reproved by Trallianus, Gordonius and others. The manner of the incision is this: The sick must be continuously placed, then the overture must be made either with Rasours, Launcet, or Cautor, three inches under the nabill, towards the flank on either side, eschewing the *Linea alba* and extremities of the muscles of the epigastre, and the nerves and tendons of *Musculus rectus*, for in hurting of these, grievous accidents may follow as fever, dolour, difficultie to consolidate the wound, sometimes death, as I have often remarked in the great Hospitall of Paris, and other parts: the incision must be very little, taking good heed you pick neither vain, ureter, nor intestine, put a hollow tent in it, with a round head made of Silver or Gold

Rasis 9 cap. 69. Alb. 1. cap. 31. Trall. Gordo. Gelf. li 7 pag. 18.

Brasav. ca. 8.

Arnald. ibid.

Instruments

Instruments to incise the Hydropick, With hollow tents of silver or lead.



evacuate the humor by little and little, stop the tent with a cloth of water-spung after it be pandred, and apply upon it a plaster of *Diachilchion* mixed in wine. Paulus counsaileth, if the hydropsie commeth from the intestines, to make the incision in the flanck. There are many other things which may be spoken of this matter, which I leave

Paul. 3 cap 48.

Celsus 3 cap 21.

to the learned Physition, being more physicall than Chirurgicall: yet by reason that sometimes it falleth under the Chyrurgions hands, I thought good thus much to intreat of it.

Chapter XLVI.

¶ Of the Fistule in the Fundament. and the Cure thereof.

Gal. de usu partium.

The Fundament, which is called in Latine *Anus*, in Greek *Hydia*: it is that part whereby the excrements of the body are discharged, and is subject to indure thirteen grievous passions or diseases, to wit, Fistula, Thymus, Condyloma, Atrices, Clausio, Ragades, Hemorrhoides, Oritus, Paralysis, Ficus, Pruritus, Siccatrix, Apostumes, with divers others, whereof Vigo, Brunus, and Theodoricus, have spoken at length. Fistule, is a hard sinuositie, from the which doth proceed a humor or matter virulent. The Cause is wounds and ulcers, evill cured, hemorroydes intern, or some Apostumes which have preceded. The Signes are evident, & may be known by the sound, or seen by the *Speculum*, accompanied with dolour in those parts: flowing of a virulent humor, avoyding of pus or matter purulent, with the excrements: Of those there are two kinds, the one is obscure, hidd within, without any appearance of orifice externally, but only within the intestine called *Intestinum rectum* or in the muscle *Sphincter*: the other kind which is manifest, is known to the sight being extern. In the cure, there is diversitie of opinions amongst the old writers: Avicen, Gordon, and some others, counsell only to apply linements, and other medicaments, with tents of Candille, and clean clothes to hold it clean: others are of opinion to use manuall operation, which is done three wayes, to wit, by Cauter, actuall, incision, and ligatour. Albucalis, Brunus, Theodoricus, and Guido, doe counsell to cut and continue the Fistule and callositie with actuall

Definition.

Cause.

Signes.

Celsi li. 5 ca. 28 lib. 7. cap. 4 & 30.

Theod lib 3. cap. 43.

Cure.

Gord part. 1. cap 7.

Brun li 1 ca 6 Alb li. 1 ca 80. Guido tract 4. de ulceris.

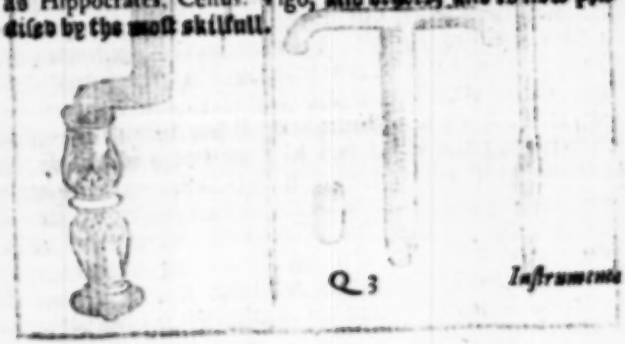
Cauters,

Cauters made and accommodated to the greatnesse of the Fistule. The Cauter consumeth the humidite, stayeth the flure of blood, but the forme is cruell, painefull, and uncertaine: there be others, who are of opinion to cut, make incision, consume and take away the Fistula with a Bistory, or other Instrument purposely made to that effect, and cut all the inner-space betwixt the orifice and fundament, as Paulus saith. This forme doe I not approve by reason of the great flux of blood, which often happeneth, as I have sometime observed: as also by cutting of the callositie often the fibres of the muscle Sphincter are consumed and cut away, which causeth that the matter fecall is not so well retained thereafter: so that at all times when the excrements approched the port, the patient is ever forced to goe to stool. I have found no forme so sure nor lesse painfull than the Ligatour, the which hath bin much approved by our ancients, as Hippocrates, Celsus, Vigo, and others, and is now practised by the most skilfull.

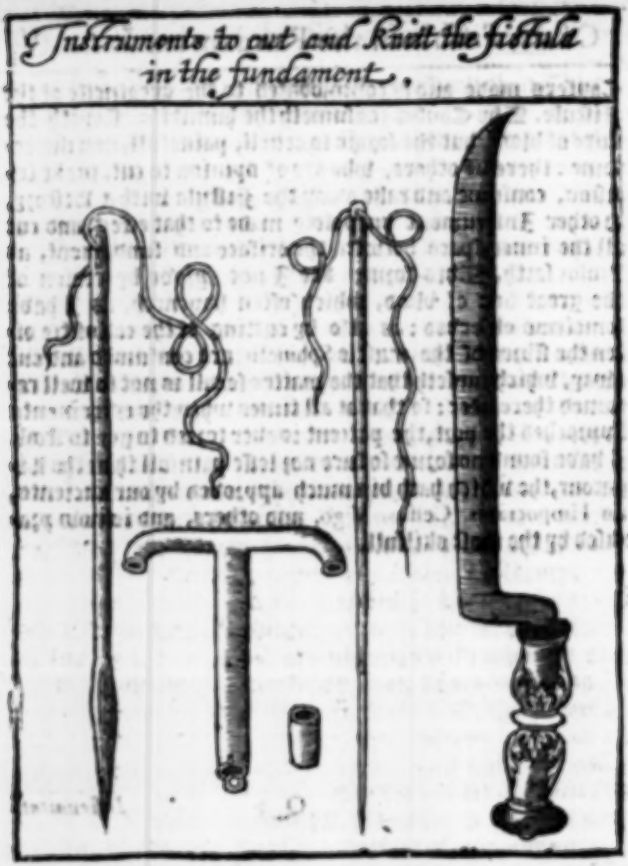
Alb li. 1. ca 36.

Paul. li. 6. ca. 78

Hip li. de fist. Vigo lib. 4. de ulcerib.



Instruments to cut and Knitt the fistula in the fundament.



the forme whereof is this, The sick must first be purged, and use a good diet for a certaine space, especialy in the night before the operation, which shall be about 8. or 9. of the clock in the morning, then the patient shall stand upon his feete, bowing himselfe forward over, either upon a bed or chaire, holding his legs and knees asunder, and so continue till the operation

operation be done, then the Chyrurgion ſhall put his middle finger in the fundament of the patient, til he come to the upper part of the Fiſtula, the finger being firſt annointed with oyl or butter, then with his other hand he ſhall paſſe a ſound made in form of a Needle Aſſtons, which muſt be made of Gold, Silver, or Lead: the Gold and Silver muſt be ſo tempered that it ply like Lead, yet hard and ſharp at the point, thread it with a thread of four ply that is well rubbed with wax: ſome doe annoynt it gently with cauſtick oyl to make it cut the ſooner: then paſſe the ſaid Needle or ſound in the orifice of Fiſtula, thruſting it forward untill the time you find it on the point of your middle finger, which is within the fundament. If there be any little membrain betwixt as often happeneth, thruſt the Needle through the ſame, which being done, you muſt ply it with the point of the ſaid finger: in thruſting it the one way, and conveying it out by the fundament, then knit the thread with a running knot ſomewhat ſlack, then tye it every day faſter and faſter till the inter-ſpace be conſumed. For this purpoſe doe I uſe a little Inſtrument of ſilver, that is holle or hollow within of two inches broad, or thereabouts, with a little round ring on the end thereof, and the Ring muſt have a reſt that it gae not about, the thread muſt be tyed to the Ring and wound about every day after it be paſt through the Inſtrument: by this means you ſhall doe the operation more cleanly and eaſter, than by only tying of it: if the inter-ſpace which you muſt cut be great and long, in ſuch ſort that ſometimes the thread doth rott therefore you muſt tye a new thread to one of the ends of the former, and draw it through, and paſſe it through the Inſtrument, and tye it to the Ring as before. If the Fiſtula be obſcure and have the orifice intern within the fundament which is more difficile than the former, you muſt with a *Speculum ani* gently dilate the fundament, till you perceive the orifice, then paſſe your Needle or ſound in the orifice as of before, thruſting it in the orifice almoſt through to the further ſide, ſo conveying it downwards

Pare. lib. 22. cap. 23.

A needle of Gold or Silver for the Fiſtula.

till it come to the ground or bottome of the Fistula. The Sound which we use commonly in this kind of Fistula, is of Lead, so is not of force to pierce through the whole byte, for the which we are constrained to make incision in the utter side against the point of it, so passeth it through with the thread, and layes it to the ring through the Instrument as before. This Cure I did use at Paris to a Scottish gentleman called Colonell Dowglas, who had the orifice of the Fistule intern so high up, and the interspace was so great, that I was the space of eight weeks in consuming of it, and the Gentleman was made perfectly whole. Here you must mark, that Fistules which are verp high, are neither to be cut nor knit, because the sick shall ever be constrained to void his excrements so soon as they approach to the port, for the which it were better to use remedies palliatives, then hazard any other cure.

Chapter XLVII.

¶ Of *Thymus* in the Fundament.

Definition. *Thymus* is the worst kind of those five sorts of waters or little tubercles which happeneth in the fundament, it is called *Thymus*, because it is *Tuberculus*, and groweth like the flower of time.

Cause. The Cause is evill humors, which doe come from the *Celsus 5 ca. 28* whole body, but chiefly *a ramo splenico*, with the humor oftentimes there is a malignity.

Signes. The Signes, Are Ulcers, Tubercles, Fetide, avoyding a matter virulent, and are for the most part small at the root.

Judgement. The Judgements, In old people sore-coming, we doe attempt no cure but only palliatives, for oftentimes being not cunningly handled, or in people of evill temperature it becometh carsinomatous, so the sick dyeth miserably.

Cure. The Cure, Is to purg the body of the vitious sharp humors

mays every week or fortnight once, draw blood, keep good diet and rest, it were good to used decotion of *China* and *Sarsa perilla* in the morning to provoke sweat, as also at meals. If that humor be retained and not purged away, it may ascend to the noble parts and suffocate the sick; for the help whereof, Hypocrates counselleth the cauter actuall to be used and alledged to have often proved the same with good successe. I have oftentimes seen the cauter actuall used in the great Hospitall of Paris, but with small successe. When these excrescences or warts be but little & few in number. I have sometimes consumed them with powders, but such as are great and many in number, are to be knit with ligatours, as you have heard in the Chapter of *Paraulis*: if any thing rest after the ligatour, you shall consume it with caustick powders, waters, and other medicaments. After which method I did cure a singing Boy in Our Ladies Church at Paris, who was grievously troubled with a Thyme about the whole fundament the space of three years, of the which I did heal him perfectly beyond the expectation of many.

CHAPTER XLVIII.

¶ Of the tumors in the Fundament called *Condiloma*, *Atrices*, and *Clausio*.

Definition. *Celsus li 6 ca 18 Aetius cap 8. lib 4. Fernel li 5 de sympt cap 11. Guido part 5. tract 2.*

Condiloma is a certain excrescence of flesh, hard, tuberculous and membrainous in the brims or borders of the Fundament, sometimes accompanied with great humor, tumor, and swelling, sometime not swelled, and are called *Atrices*. The Cause is the weakneſſe, softneſſe, and low situation of the part, also defluxion of humors which become rotten, for the which it is hard of curation. The Signes are manifest to the sight, accompanyed with great tumor and dolour. The Cure consisteth in good regiment of life, and rest, purging of the body chiefly with Glisters, bleeding

Cause. *Celsus loco citat.*

Signes.

Cure. *Paul. li 3. ca 19.*

bleeding in the arme to divert the humor and stay inflamation, use vomitories and things to provoke urine. The topicall remedies are to use lineaments refrigeratives in the beginning of oyl of Roses, *Cydonium*, whites of eggs, thereafter use remolliants & discutients: if it tend to suppuration, use such remedies as you have heard in others, putting therto a little *Tapsus Barbatus*. It must be opened in form circular, to the end the matter be not long retained, which easily causeth Fistula. If the excrescence be great and hard, it must be consumed with caustick instruments, as counselleth *Celsus*. Sometime the fundament is closed, as once I saw in the Country of *Picardy* of *France*, in the town of S. *Quintin*, where I did bring a woman to bed with two children, the one had an excrescence of flesh from the fundament, and did dye soon after it was born, the other had a membraine which did close the passage of the excrements, which I cut with a bistory and it healed very easily. This happeneth often to maydes in their naturall conduits, for the which doe the like, otherwise have your recourse to *Celsus*, or to my Book of the Infantment, where I have amply entreated of that matter.

Lib 6. cap. 18.

Paul. li 6 ca. 81

Alb li. 2 ca 70.

Lib 7 cap. 28

Chapter XLIX.

¶ Of the tumors in the Fundament, called *Hemorrhois*, and *Ragades*.

Definition.
Bru. li. 7. ca 15.
Ral li 9 ca 80
Al li 2 ca 81.
Ra li 3 ca 45

The Hemorrhoides are an inflammation of some one of more of the four vaines which goe about the fundament, of which there are divers kinds, as sayth *Fernelius*: some are interne, which are not to be seen, others extern, some are swelled and doth avoyd no humor, but in tract of time return inwardly, sometime open and doe avoyd a boundance of melancholique blood which maketh great pain.

Cause. The Cause is great aboundance of melancholique, pitui-

tous,

tous, or bilious bloud, great usage of mordicant medicines.

The Signes: If the humor be cold, the sick feeleth great heavinesse, dolour, and trembling of the belly: if the humor be hot, there is great pulsation, evill colour of the face, and heavinesse of the eyes. *Gord part. 3. cap. 2. Signes.*

The Judgements. The disease is dangerous and difficile, in respect of the great evacuation which oftentimes ensueth and causeth Syncopie, evill colour, and weaknesse of the body, which doe often end in *Fistula*: If they be suddenly stayed, they often doe ingender dangerous maladies, and sometimes death, by reason of the humor which taketh the course as to the liver, or lights, as saith Barta Pallia. If they abound moderately it is good, and doth preserve the sick from Melancholique, Leprosie, Stranguria, paine in the sides, and inflamation of the Lungs. The naturall course of them is, to abounde every moneth once, or at least foure or five times a yeare. *Judgement. Hip. li de Hemor. Ra li 9 ca 80. Barta Pallia. Hippo 6. epid.*

The Cure is somewhat difficile, the part being sensible and cold, having no force of it selfe, as also being in the part easie to receive fluxion of humors, and not easie to become untoat all times: yet the cure (in so much as may be) consisteth in good diet, abstaining from all things of evill digestion, and which breed melancholie, next purge gently the body, bleed in the arme, if either they flow over-moderately, or be painefull, also bleed the veine Saphen: if they be tumified, apply an horse-leach called by the Latines *Sanguisuga*, and that of such qualitie, as you may perceive in the eight Treatise of this Booke, and use some medicaments to make them fall away, and to ease the paine, as cataplasmes, fomentations, halfe bathe, or fallettes of Henbane, *Tapsus Barbarus*, Camomill, Violets, red Roses, Mallowes, Linseed, all sodden in milke and applyed on the part: also you may apply the yolke of an egge, Oyle of Roses, Rose-water, and creame, after the foresaid manner. Sometime I have used with good successe Early flower mixed with Women or Goates milke, adding thereto a yolke of an egge, and a little *Cels li 6 ca. 18 Fuch lib 3 de viden. morb. Baptista Mantuanus. Roger. tract. primo. ca 91. Ra li. 3 ca. 45.*

Cure.

lipps, gumms, leggs, fundament, mouth of the matrix, and ſuch parts as are emptie of fleſh, as noſe, fingers, toes, alſo about old Ulcers, and Apoſthumes of the emunctoryes and others that are venomous, rubbing the part ye put them on, till it growe red. They draw only ſuperficially the blood which is in the fleſh, and ſo are good *pro morbis ſubter curaneis*, like as in the ſcabbe called *vitiligo*, which is a foulneſſe of the body, with ſpots of divers colours: alſo in the diſeaſe called *impetigo*, which is that which we call ordinarily the Ring-worm: alſo in great itching in any part they be thought meeter to be uſed, than ſcarrification, becauſe they draw the corrupt blood more profoundly: if they be applyed on the fundament, they make evacuation from all the members, the part where we apply them muſt be very clean, otherwiſe it will not abide, in applying of them, take them with a peece of clean cloth, or with your hand; ſoftly hold their head to the part you would have them bite, and for the more eaſie doing thereof, we put a drop of Pigeons or Chickens blood on the part, or pick the part a little to cauſe ſome blood to come out: then if you would have them to draw much, cut the ends of them with the ſheers to let the blood runn: otherwiſe, if they fall away too ſoon, you may applie freſh ones in their place, or the ſame being well ſtripped, and the blood expriunt out of them betwixt your two fingers: if you would make great evacuation, you may apply two or three at the firſt, to make them fall away you ſhall put a corn of Salt or drop of Vinegar on their heads, or a few finders, otherwiſe ſeparate them with an horſe haire: if after they fall the place bleed too much, we apply Cotton, or burnt cloth, or cloth wet in cold water, or halfe a Bean bound and tyed to the part: ſometimes by unskilfulneſſe it happeneth the Blood-ſuker doth draw too much, or elſe the partie is ſuffered to bleed much after they fall away, whereof evill accidents often happen; as chanced in the perſon of a worthy and notable Captain my good friend, called Captain Gonſales a Spaniard, who having

Alb. l. 2 ca 37.

Gal lib de hæmorrhoidis

Henricus Ranzovius.

ſome

some Ulcers on his legge, did cause to apply eight Horsleaches thereto, by the which he lost neer six pound of blood, thereafter fell in *Illeritia* and ebulition of cholerick humor, *quia sanguis est frenum cholerae*, thereafter he became hydropick incurable, *quia qui calidi sunt, cepate si in asciten incidant omnes fere sunt deplorati*: to this Gentleman died to the great griefe of many; so my counsell is, that after they be taken away and make reasonable evacuation, that you by all means stay any further flux of blood. If there be venenositie in the part after they fall, we foment the part with water and salt, sometimes a cornet or little ventose to draw out that which they have left, some doe use before the applying of them, to purge the body, if it be repleat with humors.

Chapter XV.

¶ Of Seton, the qualities of it, and way how it should be applied.

Seton, which the Latines call *Seta*, is a little round cord, which of old was made of haire or thread and now is ordinarily made of small Linnen cloth, wollen, yarn, or silk, and is drawn through the flesh or skin with a sharp needle, in divers parts of our bodies for divers occasions, like as for revulsion, evacuation, derivation, or interception of some humor, like as in the neck, betwixt the 1 and 2 vertebre, sometime lower down, and is good to divert and draw away flurions from the eyes, catarhs from the head, which might fall on the stomack, gummes, loines, back, hanches, and other joints or parts of our body. Secondly, we apply it in the Navill, when it is swelled or tumified with water or other humors. Thirdly, in the codds, for water or weak humors contained in those parts; as also for such as are hydropick. Fourthly, we apply them in wounds which doe penetrate through one part to another, as

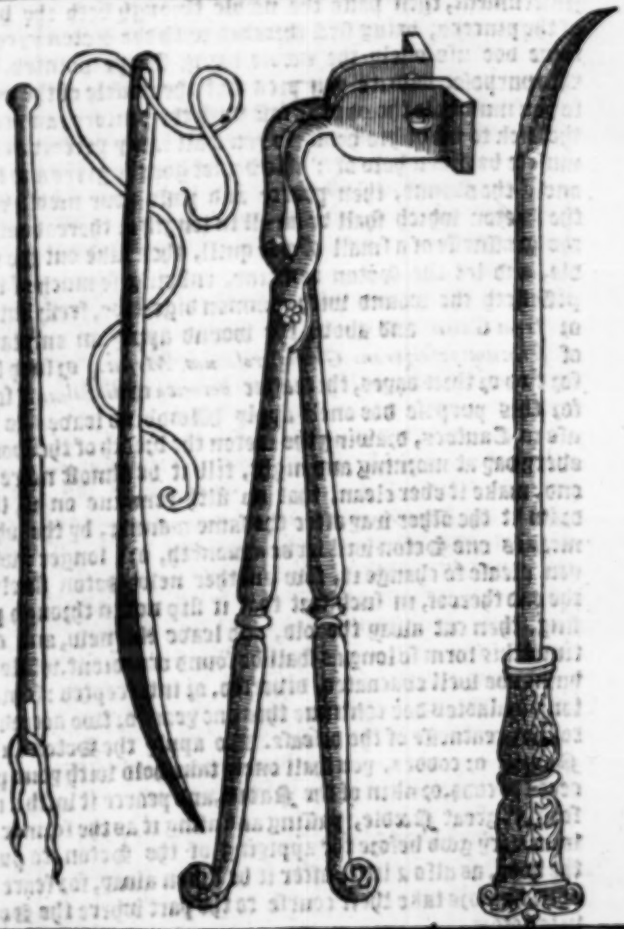
Definition.

Divers places where the Seton should be applyed.

as through a legg, thigh, arme, or other part for the better evacuation of matter in those wounds, they are applyed with an hot Iron as did our Ancients, or without fire as now is commonly practised: for performing whereof, if in the neck, we set the sick in a chair, then one taketh the neck behinde, where you would apply it equally, betwixt his hands neither more to one side than to another. I doe ordinarily marke the part with inke before, then take the skinn with the one hand next the head, and the other lower down, leaving two inches or thereabout betwixt the hands, then the Chirurgion shall take hold of the same with his pincers.

Instruments

Instruments of Seton.



made

made for that purpose, thereafter pearce it with a sharpe Instrument, then passe the needle through both the holes of the pincers, being first threaded with the Seton or cord: some doe use onely the needle being sharpe pointed, for this purpose, beware you pick not the muscle of the neck, so you must hold the skinne fast with the pincers, and cause the sick to move his head, so you shall easily perceive if the muscle be taken hold of: if so be, let goe the gripe and take onely the skinne, then pearce and passe your needle with the Seton which shall be an ell in length or thereabouts to the grossnesse of a small Goose quill, then take out the needle, and let the Seton remaine, rubbing so much of it as possesseth the wound with common digestive, fresh butter, or *ceratum Galeni*, and above the wound apply an emplaster of *ceratum refrigerans Galeni*, *rosatum Mesues*, or such like for two or three dayes, thereafter *betonica* or *diapalma*: some for this purpose doe onely apply Woodbind leaves as we use in Cauters, drawing the Seton the breadth of the wound every day at morning and night, till it be almost neere the end, make it ever clean, that no filth remaine on it, then draw it the other way after the same manner, by the which meanes one Seton will serve a moneth, or longer: when you please to change it, sow another new Seton finely to the end thereof, in such sort that it slip not in through passing, then cut away the old, and leave the new, and continue this form so long as shall be found expedient, while the humor be well evacuated, diverted, or intercepted: some in long maladies doe continue this one yeare or two according to the greatnesse of the disease. To apply the Seton in the Navill, or coddes, you shall onely take hold with your pincers the cods, or skin of the Navill, and pearce it with a reasonable great Needle, passing and using it as the former; it were very good before the applying of the Seton, to purge the body, as also a little after it be taken away, for feare the evill humors take their course to the part where the Seton was before.

CHAP.

Chapter XVI.

¶ Of Cauters actuals, their forms, and whereof they are compoſed.

The Cauter actuall, which is called by the Latines *Cauterium actuale*, is a remedie that hath bẽn thought by one Ancients very profitable for the help and recoverie of many diſeaſes: it doth burn actually the part where it is applied, and is moſt commonly made of Iron, Braſſe or Lead: ſome are made for the wealthier ſort of Gold or Silver, in divers formes, according to the diſeaſe and part where they are applied, as ye may perceive in Lib. 9. Chap. 7. and it is thought for ſome diſeaſes oftentimes to be more meet to be uſed: than the potentiall Cauter: if we conſider the nature and ſubſtance whereof the potentiall is compoſed, by reaſon that ſome ingredients thereof are venomous, and the actuall is without venenoſitie, ſo more healthfull alſo, very ſudden, and ſure in operation, not offending nor cauſing any accident to the parts adjacent where it is applyed: it is enemie to all venome and corruption, preſerveth the part where it is applyed from putrefaction, and conſumeeth mightily the maligne and venomous quality which is hid in any part of the body, it being there applyed, it correcteth the cold weak temperature, conſumeth and dryeth up all ſuperfluous humiditie, with divers other profitable helps: For the which learned Chyrurgions of old, did uſe divers formes of actuall cauterizations, as witneſſeth Galen, Hippocrates, and others who ſometime did cauterize with burning oyle, ſtampe the rote of *Ariſtolocea* therein, then light it at the fire, and applied it burning to the part. Celſus, Aurelius, Dioſcorides and Attilus, ſometime did cauterize with drie goats dung fired, Ætius with burning oyle, Aducaſis did cauterize teeth and other corrupt parts with boyled Butter, Guydo with melted Brimſtone: all theſe formes were wont to be applyed in divers

Gal. 6. ſimp. cap. 27. Alb li. 1. cap 2.

Celſus, Aurelius, Dioſcorides, Attilus, Ætius. Alb li. 1 cap. 2. Guydo

divers parts of the body, for divers occasions. Like as for discharging of nature, either by revulsion, interception or evacuation of any humor, which did offend either in quantitie or qualitie, also for evacuating of a malignant and venomous vapour that is hid in any part, chiefly about Ulcers corrosives, and ambulatives, fluxions of the nose, *Ægilops*, sciatick passions, and all other parts that require evacuation, they are sometime applied on the head, at that part where the suture sagitall doth end, and the coronall begin, which I have often practised for the megrom and other dolours of the head, by which meane divers grosse humors and vapors doe exhale from the braine: they be likewise applyed for the Epilepsie, to give issue to some vapour venomous at that part which often causeth the disease, they be also used for shortnesse of breath, dolours of the teeth, eares, and squinances, inflamation of the amygdals, *Columella*, and other diseases of the mouth, anheles: also for the haires which grow within the eylids, in *Polipus*, *Ozena*, some use to apply them in five sundry parts of the head, for Leprosie: but for the rare effects which follow upon it, for the present, I will overpasse them. These be the formes and utilities of those actuall cauters which was practised by our Ancients: On those parts where we apply those Cauters for Gangrens, or great flux of blood, we put on the parts adjacent a compresse wet in Oxicrate, juyce of Plantine, Oxall, or whites of Egges beaten with Plantine, water, and the cauter being applyed to corrupt bones: in Ulcers we apply about the borders of the sayd Ulcers, little peices of cloth wet in either of those liquors, or a little *refrigerans Galeni*, which both doe pacifie the paine, and causeth the escharre to fall: it softneth the escharre and parts adjacent, by the humiditie. This Cauter by the heat doth excitate the naturall heat from the center to the circumference, after the applying of it, we commonly doe use a digestive made of oile of Roses, Turpentine, and yolks of Eggs; others use only oile of Eggs, and Turpentine,

Albu. loco cita.

mixed

mixed with a little powder of *Ariſtolichia*, & Beane meale. Some late practicioners (chiefly the Italians, who have beene more curious than is needfull) have for the moſt part neglected all thoſe formes of cauterizing, alledging them to be over-vehement, fearefull to be practiſed, and not to be uſed but in great extremities, like as in ſtaying of vehement flux of blood, in great vaines and arteries, in gangrens and mortifications, carbuncles and bubons malignes, corrupt and rotten bones, they being enimies to all rottennesſe and corruption, and helpeth the ſeparation of the bones; alſo in venomous Ulcers and biting of venomous beaſts, are very profitable: as for all other occaſions that they were uſed for by our Ancients, we now doe uſe in their place the potentiall Cauter, as you ſhall heare in this next Chapter.

Chapter XVII.

¶ Of the cauter Potentiall, and compoſition thereof.

The potentiall cauter which the Latines doe call *cauterium potentiale*, or *piroticum*, is that which by the extreame heat hath the force to burne the part where it is applyed like fire, leaving an eſcharre or cruſt. It is compoſed of divers ſorts of matter which be hot in the fourth degree: of theſe, ſome be extreme hot, others not ſo hote according to their operation. Among the which are reckoned Cantharides, Vitriol, Martar, Arſenick, Orpiment, Sublimat, ſtrong water, oyle of Vitriol, Cloves, Sage, or Brimſtone; as alſo of divers other things, as aſhes of the barke of Aſhe, Palme, Oake, Figge, and Vine-tree, Beane ſtalks, quick Lyme, Salnitre, Ammoniack, *Axungia vitrei*, Vine-ſtone, and gravill, all theſe or a part of them ye may ſteep in water foure or five dayes, covering them cloſe, and removing them with a peece of wood every day, morning and evening, then ſtraine it through a cloth, and keep it in glaſſes Definition.

les for your *lixivium* or *capitellum*; when you have to doe to make your cauters, you shall boyle such quantitie of that lixive in a brazen pan at an hot burning fire, till such time as it shall be congealed to salt or stone, which being taken from ỳ fire, you shall cut it in little peeces, to the bignesse of a pis or halfe a pie, and put it in close glasses, that no aire enter therein. The forme of their composition which I doe use is this: Take the ashes of the inward bark of Ashe, Palme, Oake, and the Vine-tree, Bean stalkes, *Esula*, quicke Lyme, gravil, *Axungia vitrei*, of each halfe a pound, Allom, and Roman Vitreol, of each 6 ounces, steepe all in 15 English pints of running water, which will be about 5 Scottish pints, mixe al in an earthen pot the space of 5 or 6 dayes, removing it every day with the baton of wood as you have heard, then put forth the water and save the grounds, and boyle it at a verie hot fire till it grow somewhat thick, at which time you shall adde unto it two drammes of *Opium* dissolved in Aquavite, it hath the virtue to pacifie the pain, and make the escharre more soft. Of this forme which was used by my M. *John Quintred* Doctor of Chyrurgerie at *Paris*, thus made, *Rec. Axungia vitrei lib. sem. salis gemmæ unc. 6, sublimati unc. sem. cineris sarmentorum & truncorum fabarum an lib. sem. aquæ lib. 10, infundantur spacio 3. aut 6. dierum. & fiat capitellum in fine decoctionis, addæ drag. 2 opii.* Of these which are composed by M. George Baker Chyrurgion to his Majestie, thus made: Take the ashes of the Oak and Vine-tree, stalkes of Beanes, and *Esula*, of each a reasonable quantitie, gravill, Vine-stone, *Axungia vitrei*, of each a little quantitie, steepe them all in water, with a little quicke Lime stone, whereof you shal make your capitall, passe it, and boyle it as the former.

Mr. *Jo. Quintred* his Cauters.

Mr. *William Clowse* his Cauters.

CHAP.

Chapter XVIII.

¶ Of certaine cautions in applying of Cauters, and on what parts they are to be put for divers diſeaſes.

The Potentiall Cauter is applyed in divers parts of the body for divers pains and diſeaſes, for the which great care muſt be had both for the nature and temperature of the perſon, and the nature of the part where they are applyed: for in ſtrong rude people, lik as mariners, labourers, porters, Pioners and ſuch like, ſharp ſtrong Cauters may be uſed. In delicate tender people, women and children, the Cauters muſt be more weake: as alſo people who be extenuat and lean, may not endure ſtrong Cauters, becauſe their bodies are membrainous which provoketh great dolour. In applying your Cauter beware of nerves, membraines, tendons and heads of the muſcles, great vaines, and arteries. If the body be repleat, you ſhall firſt purge and let blood: they are applyed in divers parts of the body, but for moſt common in the head, armes, and legs. They uſe to be applyed in foure divers parts of the head, the haire being firſt raſed, but moſt often in the fore-head, where the ſuter ſagitall mæteo with the coronall, which part is remarked by *Albucaſis* after this forme, the Chyrurgion muſt cauſe the ſick perſon to put the point of his thumb upon the top of his noſe, then extend his middle finger right line ſo farre upon his fore head, as he can judge which part ſhal be the juſt place where the cauter ſhould be applyed, and muſt penetrate to the bone, which is good for fluxions on the eyes, the Megrim, and other dolours of the head, the epilepſie, difficulty of breath. Ophthalmie, redneſs of the face pain of the teeth, eares, and Squinancy. We apply them behind and above the eares, in both ſides of the head, at the extremity of the ſuter *Lambdoid*, taking good heede of the muſcle *Cratophie*, for the more aſſurance of the which hold

Albu. lib. 1 cap. 2.

on the point of your finger fast on the part where you would apply the cauter, then the sick must close & open his mouth, by which means you shall perceive where the sayd muscle endeth, by the motion of the sayd muscle. Fourthly, we apply them in the neck. There is an Italian Phisitiner that vaunteth himselfe to be the first author of applying of Cauters in that part; yet I have read, that, that part was observed a long time before by Hippocrates: this Cauter should be applyed betwixt the first and second vertebre, for inveterate fluxions and diseases of the eyes, for Cauters and distillations of the head, to evacuate and stoppe them from falling on the thorax, and some principall part, they are also put on the inner syde of the arme, about the middest thereof, neere unto the vaines and arteries, but no wayes touching them: for assurance of the which, hold your finger on the part, cause the sick to move his arme, so shall he easily perceive if there be either vaine arterie, or nerve under it: we apply them on the legge, within three inches to the knee, either in the quadre betwixt the two bones, or in the inside neere unto the vaine, and is good for the critiche, for interception of humors, which doe cause and entertaine Ulcers and pain in the legs and feet: They are also applyed in divers other parts of the body, to give issue out to the matter therein contained, or where there is behement dolour or humor malignant, and some vaporous, and in the emunctories to give issue to any vapour or humor, which must be done before the perfect suppuration thereof, as you have heard in the Chapter of Parotide.

Theo lib. 3 cap 41.

Brn. lib 2 cap 18

Hip lib de natura ossium

Chapter XIX.

Shewing the way to apply Cauters rightly

TO apply Cauters rightly, the Chyrurgion must justly marke the place, either with the point of his finger, or drop of ink, then make a little emplaister the breadth of a

nit

rij pence either of *Diapalma* or some astringent and sticking plaster, with a little hole in the midst of it, as you shall think meet for the greatnes or littlenes of the issue that ye would make, apply the plaster in such sort, that the mark of Iuh appear in the midst of the hole of the said plaister, then apply your Cauter on the said hole; some doe wet this hole with a little spittle before the applying of the Cauter, so it shall work more easily, thereafter put another emplaster about it and bind it with a little thick compresse, leting it remain till such time it work the effect you require, which will be in four or five houres, if you think that the first Cauter hath not gone deep enough, apply another after the foresaid manner, which being done, take away the plaster and scarifie the escharre, and apply on it to separate the escharre or burnt part from the hole a little oyle of roses, turpentine, or butter, with a little *Iris* of Florence, or basilicon, soon after the first emplaster is taken off, doe cut clean away the escharre with a bistorie. I do only scarrifie: thereafter apply a medicament for four or five dayes, in which time the escharre doth commonly fall away, and the humor taketh course to that part; which done, it must be holden open till such time as the disease be whole, for which it was made to hold it open, we use a great pie, a little ball of Gold or Silver gilt, of the bigness of a small pistol bullet, soon mark those bals of Rubarb, Woodbine, Bush, or Agaric; I my self doe use certain balls which last five or six moneths, and hath the virtue to draw and hold open, and are thus made. Take wax 1 dram, Verdegrease, Oppimeunt, and Hermodactyles, of each 1 unc. Sublimat and powder of Cantharides of each dim. unc. with a little rayson. I make little bals which may be kept for your usage, and use as the former, putting on the wound a woodbine leafe, with a compresse of clean linnen cloth in two doubles, tye it with a band and dresse it morning and evening, if it void much: if not, once a day: for such as travell, and may not ever get woodbine leaves, I do use Seare-cloath which lasteth five

or six weeks wiping it clean and using sometime one side, sometime another, and is thus made. *Rec. emplastrum triformici. lib. sem, cerae albae unc. 2. camphorae unc. 1. litargiri, auri pulverizati unc. 2. spicinardi unc. 1. olei olivarum unc. 1, misce omnia simul.* Melt all the ingredients, thereafter dip a round linnen cloth therein, then cut it in peces, to serve for your use: as also it is good for cold humors, and Ulcers: Sometime we are constrained to continue those Cauters for a long time, if so happen every yeare once, it were good they were removed a little, either higher, or lower, or side wayes; so the matter will avoyd the better, for oftentimes the bodys of the Cauters become callous and hard, so empacheth the much flowing of them. If you please not to renew the Cauters, you may consume such callosities by such remedies as ye have heard in Ulcers, with callositie, if in those Cauters or fountenels there be excrescence of flesh, which sometime groweth and weareth forth the bullet, it must be cured by such remedies as ye have heard in Ulcers, with excrescence of flesh: It happeneth sometimes after the Fountenell or Cauter beginneth to runne, there commeth inflamation and dolour in and about the part: for remedy whereof you shall apply *Cerat. refrigerant, Galeni, Populeon. Rosatum Mesuei*, or some Unguent, or Cataplasme Anodyn: oftentimes when those issues doe run much and are not often handled and dressed, the parts adjacent become ulcered or excoriate by the acrimonie of that humor which flowerh, which causeth great paine; for the cure whereof, you must annoynt the part with *Cerat Galen*, Pomad, or red desiccative, untill such time the excoriation be whole. As for those that make a skarre like unto the Cauter Actuall, they be of divers formes, and are applyed in sundry parts of the body, for divers affections, as you have heard.

CHAP-

Chapter XX.

¶ Of Bathes and their Effects.

Bathing, as by the learned Herodotus is at large declared, is a washing and steeping of the whole body, for the better preservation and conservation of Mans health, and recovery of that which is lost, which was had in great use and custome amongst the Ancients, as among the Grekes Arabians and Latines, and is also very much used and practised in all Nations in these our dayes, and is reckoned among the sorts of evacuations, a singular remedy: whereof there are two sorts, one naturall, and another artificiall. The naturall are said to bee such, as come and proceede naturally out of the ground, and are alwaies warme and hott of themselves, but yet are of divers sorts, qualities, and vertues, according to the diversitie of the places, from whence the water cometh and proceedeth, as if it come from Salt, Allom, Sulphur, Brasse, Copper, Gold, Iron, and such like. The Salt is good for pituitous, cold, and humide Maladies, Hydropsie, dolours, pains and Aches of the Belly, Stomack, Matrix and Kidneys, also it is good for all Catarres, Epilepsie, dolours of the bladder, head, stomack and eares, whites of women, and Scabbes, Generally through all the body, as is at large discoursed and set downe by Galen. The Alluminous are drying and heating, and is good for all cold and humide diseases and sicknesses, vomiting of blood, staying the hemorrhoides, the monethly course of women, aborting with childe, varices on the legges, hydropsie, maligne ulcers, rotten, waterie tumors, for all sorts of vomiting. The Sulphurous are drying in the fourth degree and heale the parts nervous, which are cold and humide, soften the hard parts, appease dolour, and comfort the stomack and splen, they are good for the stone, strangury, for all cold and humide Maladies, Palsies, Hydropsies, Apoplexies, yet they

Herodotus.

Aet. Tetrab. 1. ser. 2.

Tralian. lib. 8.

Gal. de sanit. tuenda.